

<b>REQUEST FOR COUNCIL ACTION</b> CITY OF SAN DIEGO				CERTIFICATE NUMBER (FOR COMPTROLLER'S USE ONLY) 3000005307	
TO: CITY COUNCIL		FROM (ORIGINATING DEPARTMENT): Public Works - Fleet		DATE: 08/13/2012	
SUBJECT: Automated Vehicle Location/Global Positioning System (AVL/GPS) Contract					
PRIMARY CONTACT (NAME, PHONE): Tony Heinrichs ,(619) 236-6953 MS 9A			SECONDARY CONTACT (NAME, PHONE): Jeff Baer , (619) 236-7163 MS 65P		
COMPLETE FOR ACCOUNTING PURPOSES					
FUND	720000	720000			
DEPT / FUNCTIONAL AREA	OTHR-00000000-GG	OTHR-00000000-GG			
ORG / COST CENTER	2113140011	2113140011			
OBJECT / GENERAL LEDGER ACCT	590113	516017			
JOB / WBS OR INTERNAL ORDER					
C.I.P./CAPITAL PROJECT No.					
AMOUNT	\$210,000.00	\$16,275.00	0.00	0.00	0.00
FUND					
DEPT / FUNCTIONAL AREA					
ORG / COST CENTER					
OBJECT / GENERAL LEDGER ACCT					
JOB / WBS OR INTERNAL ORDER					
C.I.P./CAPITAL PROJECT No.					
AMOUNT	0.00	0.00	0.00	0.00	0.00
COST SUMMARY (IF APPLICABLE):					
ROUTING AND APPROVALS					
CONTRIBUTORS/REVIEWERS:		APPROVING AUTHORITY	APPROVAL SIGNATURE	DATE SIGNED	
Environmental Analysis		ORIG DEPT.	Heinrichs, Tony	8/24/2012	
Liaison Office		CFO			
Debt Management		DEPUTY CHIEF			
Comptroller		COO			
		CITY ATTORNEY			
		COUNCIL PRESIDENTS OFFICE			
PREPARATION OF:	<input type="checkbox"/> RESOLUTIONS	<input checked="" type="checkbox"/> ORDINANCE(S)	<input type="checkbox"/> AGREEMENT(S)	<input type="checkbox"/> DEED(S)	
Authorize the Mayor or his designee to execute an agreement with Radio Satellite Integrators to provide Automated Vehicle Location/Global Positioning System (AVL/GPS) services to the City of San Diego (City).					
STAFF RECOMMENDATIONS: Approve the agreement					

SPECIAL CONDITIONS (REFER TO A.R. 3.20 FOR INFORMATION ON COMPLETING THIS SECTION)	
COUNCIL DISTRICT(S):	All
COMMUNITY AREA(S):	All
ENVIRONMENTAL IMPACT:	The activity is not subject to CEQA as provided in the Guidelines section 15060(c)(3) because the purchase is a continuing administrative or maintenance activity and therefore not a project pursuant to Guidelines section 15378(b)(2).
CITY CLERK INSTRUCTIONS:	

**COUNCIL ACTION  
EXECUTIVE SUMMARY SHEET  
CITY OF SAN DIEGO**

DATE: 08/13/2012

ORIGINATING DEPARTMENT: Public Works - Fleet

SUBJECT: Automated Vehicle Location/Global Positioning System (AVL/GPS) Contract

COUNCIL DISTRICT(S): All

CONTACT/PHONE NUMBER: Tony Heinrichs /(619) 236-6953 MS 9A

**DESCRIPTIVE SUMMARY OF ITEM:**

A request to approve an agreement with Radio Satellite Integrators to procure and implement an AVL/GPS system that will enhance the ability to maximize fleet utilization, improve communication/safety for City employees, and reduce vehicle operating costs.

**STAFF RECOMMENDATION:**

Approve the agreement

**EXECUTIVE SUMMARY OF ITEM BACKGROUND:**

The Fleet Services Division intends to acquire a City-wide GPS system with lease funding. The City utilizes lease purchase short-term financing to acquire essential equipment and services. The GPS project was initially included in the Master Lease Agreement approved by Council on January 11, 2011. GPS funding was scheduled for FY 2012 but implementation of the project was delayed due to competing financing priorities.

A revised GPS funding allocation was included in the FY 2013 Master Lease Agreement. The Budget and Finance Committee forwarded this Agreement on April 11, 2012 which was approved by Council on May 22, 2012.

The IT-BLG (IT Business Leadership Group) approved the AVL/GPS project on July 20, 2012. The evaluation determined that the project was technically feasible and consistent with City IT policies. A detailed cost/benefit analysis of the leased-financed portion of the GPS project was conducted for the IT-BLG showing a positive net present value (NPV) over the first five years.

The City owns and operates a vehicle fleet of 4,050 vehicles consisting of motorcycles, parking enforcement scooters, sedans, law enforcement vehicles, light trucks/vans, medium/heavy duty trucks, fire apparatus, refuse collection trucks, street sweepers, trailers, tractors and industrial equipment. These vehicles support all City services, are assigned to several departments and primarily operate within the city and county of San Diego. The City intends to optimize its vehicle and staff resources by procuring and installing an integrated AVL/GPS system to improve vehicle utilization, employee productivity and safety.

The Police, Fire, Environmental Services and Public Utilities Departments currently operate multiple AVL/GPS systems. These existing systems represent a variety of components, configurations, complexity and operating characteristics and are independently operated to provide specific data related to departmental requirements. Approximately 2,000 City vehicles

have AVL/GPS technology, leaving approximately 1,500 vehicles that will require future installation of AVL/GPS units.

The goal of this project is to equip the majority of City vehicles with AVL/GPS technology based on current and future operational requirements. The contract will develop a system that leverages existing equipment and deploys AVL/GPS hardware on unequipped City vehicles.

The system will:

- Monitor and report real-time and historical vehicle location, heading and usage information
- Provide supervisory and management staff with vehicle usage information
- Provide vehicle operating data, including drive train diagnostics, idle time, and odometer readings
- Report and record ancillary equipment usage such as sweeper boom up/down, or police siren on/off
- Allow City vehicle drivers to transmit and receive text messages

#### FISCAL CONSIDERATIONS:

A total of \$2 million will be financed by the Master Lease Agreement (O-20166). The funding is facilitated under a master lease agreement with a lender JPMorgan Chase Bank, N. A. ("Chase") by establishing an upfront tax-exempt line of credit over an agreed upon five year financing term. Under the master lease agreement with Chase, the City covenants to include lease payments in its annual budget to make necessary annual appropriations. Assuming that the entire \$2 million is financed by the end of November 2012, one semi-annual lease payment of \$210,000 is projected in Fiscal Year 2013 and is budgeted in the Fleet Services Operating Fund. The projected sales tax payment of \$16,275 for the FY 2013 semi-annual lease payment is budgeted in the Fleet Services Operating Fund. The annual lease payments for FY 2014-2017 are \$420,000 and the FY 2019 semi-annual lease payment is FY 2018 is \$208,000. Total Principal and Interest for the five year term is \$2.1 million. The City will own the equipment funded by Chase at the end of the repayment term.

Individual departments will have the option of separately budgeting for and purchasing additional GPS equipment in an amount up to \$1 million under the contract.

The annual recurring costs for the AVL/GPS system include licensing, wireless charges and extended warranty fees. The licensing fee covers the software maintenance, support, updates, and upgrades. The cost is \$18 per vehicle per month and will be recovered through the Fleet services rates. The wireless fee will depend on the data plan selected and range from \$6 to \$38 per month per vehicle. This fee is the responsibility of the Departments and will be partially offset by Departments with existing GPS systems. Fleet Services will also have the option of paying a \$19 per vehicle per month extended warranty fee to cover any maintenance on the hardware. The City will start paying the recurring fees in FY 2014.



The AVL/GPS system will produce resulting operational and maintenance efficiencies as it is deployed to the fleet. Once fully implemented, the system will generate an estimated \$300,000-\$400,000 in ongoing annual savings.

**EQUAL OPPORTUNITY CONTACTING INFORMATION:**

This agreement is subject to the City's Equal Opportunity Contracting (San Diego Ordinance No. 18173, Section 22.2701 through 22.2702) and the Non-Discrimination in Contracting Ordinance (San Diego Municipal Code Sections 22.3501 through 22.3517)

**PREVIOUS COUNCIL and/or COMMITTEE ACTION:**

This item will be heard by Budget and Finance Committee on September 26, 2012.

**COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:**

Not applicable

**KEY STAKEHOLDERS AND PROJECTED IMPACTS:**

Radio Satellite Integrators, Inc. All City Departments utilizing GPS equipped City vehicles.

Heinrichs, Tony

Originating Department

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Deputy Chief/Chief Operating Officer

## Contract Form

This contract is entered into by the City of San Diego, a municipal corporation (“City”), and Radio Satellite Integrators (“Contractor”) for the scope of services specified herein as a “hosted solution”. For good and valuable consideration, the sufficiency of which is acknowledged, the City and Contractor agree as follows:

- A. The Contractor shall perform the services described in Section C – Scope of Services in return for payment by the City set forth in Section B – Price Schedule, all in accordance with the terms and conditions set forth in the Contract Documents consisting of Sections A through J and the Contractor’s Proposal, incorporated herein by reference.

This is a firm fixed unit price contract with quantities to be determined as may be required. As set forth in the Contract Documents, all financed goods and services will be ordered through a task order letter referencing the Contract Number and paid for by means of the City’s Master Lease Financing Program. All non-financed goods and services will be ordered through a Purchase Order referencing the Contract Number and paid for by means of encumbered funds.

- B. It is the intent of the Contract Documents to completely describe the services to be provided. Any work, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result shall be supplied whether or not specifically called for or identified in the Contract Documents. When words or phrases which have a well-known technical or construction industry or trade meaning are used to describe work, materials, or equipment such words or phrases shall be interpreted in accordance with that meaning unless a definition has been provided in the Contract Documents. In resolving conflicts resulting from errors or discrepancies in any of the Contract Documents, the order of precedence shall be as set forth below in descending order of precedence (the document in section B.1 having the highest precedence). Provisions of the Contract Documents addressing the same subject which are consistent but have different degrees of specificity shall not be considered to be in conflict, and the more specific language shall control.

### Order of Precedence:

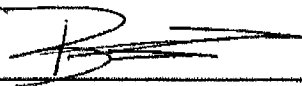
- |     |   |
|-----|---|
| B.1 | This Contract Form and Section A (Signature Page).  |
| B.2 | Section C (Scope of Services).  |
| B.3 | Section B (Price Schedule).   |
| B.4 | Section H (Special Contract Requirements)   |
| B.5 | Section I (General Contract Clauses)  |
| B.6 | Sections D (Packaging and Marking), E (Inspection and Acceptance), F (Deliveries or Performance), and G (Contract Administration Data). |
| B.7 | Section J (List of Attachments, Exhibits or Appendices).  |
| B.8 | Contractor’s Proposal.  |

- C. Once the City issues a letter of Award to the Contractor, the Contractor is required to provide any requisite information or documents prior to contract execution as specified in Section L of this Contract, such as certificates of insurance, bonds, or business license, to the Purchasing & Contracting Department within ten (10) calendar days. Failure to provide requisite information or documents may result in the Contractor being rejected as non-responsive.
- D. Contractor shall be bound by and shall perform in strict conformity with the terms and conditions of this contract.

For such performances, the City shall pay to Contractor the amounts set forth at the times and in the manner as are provided for in this contract. This Contract shall not exceed \$3,000,000.00, unless the City notifies Contractor in writing that additional funding has been authorized. Of this amount, a total of \$2,000,000.00 will be financed by the Master Lease Agreement (O-20166). Individual City departments will have the option of separately budgeting for and purchasing additional goods and services in an amount up to \$1,000,000.00 under the Contract.. Contractor is not obligated to provide goods or services in excess of this amount unless additional funding is authorized, and does so at its own risk until written notice is received from the City. Contractor shall promptly notify the City in writing if it reasonably anticipates the cost to the City will exceed this amount during the initial one (1) year term (or the authorized amount for any option year), so that the City may request additional funding, reduce its consumption or seek additional sources of the goods or services.

- E. This contract shall be for a period of one (1) year effective on the date as specified in a Notice to Proceed letter which will be issued by Purchasing & Contracting Department only after this contract has been executed by the last party to sign the Signature Page (Section A), and approved by the City Attorney in accordance with San Diego Charter Section 40, with options to extend for four (4) additional one (1) year periods in accordance with Section I.05 of this contract.

**SECTION A**  
**SIGNATURE PAGE**

<b>1. Contract No.:</b>		<b>2. RFP No.: 10022954 -12-Z</b>	
<b>3. Contract Title: Automated Vehicle Location (AVL)/Global Positioning System (GPS)</b>			
<b>4. Contract Amount: See Contract Form.</b>		<b>Prompt Payment Discount Terms: _____ % _____ Days</b>	
<b>5. Term of Contract: See Contract Form.</b>			
<b>6. Contractor Name: Radio Satellite Integrators, Inc.</b> <b>Address: 19144 Van Ness Ave.</b> <b>City/State/Zip: Torrance, CA 90501</b> <b>Telephone: (310) 787-7700</b> <b>Contact: Brett Lim</b> <span style="float: right;"><b>E-Mail Address: Blim@radsat.com</b></span> <b>The City of San Diego Business Tax License Number:</b> <b>Federal Tax ID Number: 33-0477102</b>			
<b>7. Contract Table of Contents</b>		<b>Contract Form</b>	
		Section A: Signature Page	
		Section B: Price Schedule	
		Section C: Scope of Services	
		Section D: Packaging and Marking (Reserved)	
		Section E: Inspection and Acceptance	
		Section F: Deliveries or Performance	
		Section G: Contract Administration Data	
		Section H: Special Contract Requirements	
		Section I: General Contract Clauses	
		Section J: List of Attachments, Exhibits, or Appendices	
		<b>Contractor's Proposal</b>	
<b>8. Signature of Authorized Representative/Contractor</b>   <hr/> <b>Brian Burda</b> (Print Name) <hr/> <b>Vice President</b> (Title) <hr/> <b>09/17/2012</b> (Date)		<b>9. Signature of The City of San Diego Purchasing Agent</b>  <hr/> <hr/> (Print Name) <hr/> <hr/> (Title) <hr/> <hr/> (Date)	
		<b>10. Signature of The City of San Diego City Attorney</b>  <hr/> <hr/> <b>Approved for Form and Legality</b> <hr/> (Print Name) <hr/> <hr/> (Title) <hr/> <hr/> (Date)	

## SECTION B

### PRICE SCHEDULE

#### A. PRICE SCHEDULE INSTRUCTIONS FOR SCOPE OF SERVICES AS SPECIFIED IN SECTION C

Proposers shall submit their proposal for pricing on the following City's Price Schedule page(s). Using the enclosed Price Schedule page(s) will help ensure consistency in the price evaluation. The Price Schedule page(s) are to be completed in full and shall be incorporated herein. Only the City's Price Schedule page(s) will be accepted. Any deviations from the Price Schedule page(s) may result in the rejection of the proposal as being non-responsive.

Proposers must provide attachment worksheets, which include a breakdown of labor hours and any other rationale used in determining their pricing for all of the specified requirements. Blanks on the Price Schedule page(s) will be interpreted as zero (0) and no price will be allowed.

#### Prompt Payment Discounts

Prompt payment discounts of twenty (20) days or more will be considered in the evaluation of Proposals. Discounts of less than twenty (20) days will be taken at the time of payment when applicable, but will not be considered in the evaluation of Proposals. Prompt payment discounts shall be identified on the Signature Page, Section A-4. Discount is taken based on the date of the payment check. Time will be computed from the date of delivery at destination or acceptance by City, or the date supplied to the carrier when acceptance is at the point of origin, or from the date a corrected invoice is received, whichever is later.

Any discount offered other than for prompt payment should be included in the net price quoted, rather than shown as a separate item. Any discount shown separately will be adjusted on the Purchase Order.

#### Pricing

Unless called for in the General Contract Clauses, no escalation factor is allowed. The Contractor must notify the City in writing in the event of a decline in market price(s) below the Price Schedule and the City will make an adjustment in the Contract Amount or elect to re-solicit.

Unless the Contractor clearly indicates that the price is based on consideration of being awarded the entire lot and that an adjustment to the price was made based on receiving the entire Proposal, any difference between the unit price correctly extended and the total price shown for all items offered shall be resolved in favor of the unit price.

Evaluation of Pricing

The lowest total estimated contract price of all the Proposals that meet the requirements of this RFP will receive the maximum assigned points to this category as set forth in Section M of this RFP. The other Price Schedules will be scored based on how much higher their total estimated contract prices compare with the lowest:

$$\left(1 - \frac{(\text{contract price} - \text{lowest price})}{\text{lowest price}}\right) \times \text{maximum points} = \text{points received}$$

For example, if the lowest total estimated contract price of all proposals is \$100, that proposal would receive the maximum allowable points for the price category. If the total estimated contract price of another proposal is \$105 and the maximum allowable points is 60 points, then that proposal would receive  $(1 - ((105 - 100) / 100)) \times 60 = 57$  points, or 95% of the maximum points. The lowest score a Proposal can receive for this category is zero points (the score cannot be a negative number). The City will perform this calculation for each Proposal.

**B. PRICE SCHEDULE**

The estimated quantities provided by the City are not guaranteed. These quantities are listed for purposes of comparing cost proposals only. The actual quantities may vary depending on the demands of the City. Any variations from these estimated quantities shall not entitle the Contractor to an adjustment in the unit price or to any additional compensation. U/M = Unit of Measure.

A. One-Time Costs:					
Item No.	QTY	U/M	Description	Unit Price - Fully Burdened Cost	Extension (Qty. x Fully Burdened Unit Cost)
1	1	Lump Sum	Costs associated with setting up, configuring, and testing the AVL server software	\$ _____	\$ n/a
2	1	Lump Sum	Costs associated with programming, interfacing, and testing hardware devices related to system	\$ _____	\$ n/a
3	1	Lump Sum	List other costs, if applicable, all costs inclusive: _____.	\$ _____	\$ n/a
<b>TOTAL:</b>					\$ n/a

B. On-going Costs (Proposer shall complete this section only if offering a Hosted Solution)					
Item No.	QTY	U/M	Description	Unit Price - Fully Burdened Cost	Extension (Qty. x Fully Burdened Unit Cost)
1.	1	EA	Hosted GPS/AVL Software Solution.	\$ _____	\$ 0

B. On-going Costs (Proposer shall complete this section only if offering a Hosted Solution)					
Item No.	QTY	U/M	Description	Unit Price - Fully Burdened Cost	Extension (Qty. x Fully Burdened Unit Cost)
2.	1	YR	Support and Maintenance Service.	\$ _____	\$ _____ 0
3.	100	EA	License per user Note: Proposer must provide price breakdown if price changes based on varying quantities.	\$ _____	\$ _____ 0
4.	100	EA	License per vehicle Note: Proposer must provide price breakdown if price changes based on varying quantities.	\$ <u>216 /year</u> (\$18 per mo. per vehicle)	\$ <u>21,600</u>
5.	100	EA	Vehicle Communications Devices: Type 1 – GPS/Vehicle Diagnostics/16 Sensor (including cables, antennas and mounting brackets).	\$ <u>495</u> (Sprint) (see options for AT&T)	\$ <u>49,500</u>
6.	1	EA	Vendor Installation of Type 1 Vehicle Communications Device.	\$ <u>120/unit</u>	\$ <u>120</u>
7.	100	EA	Vehicle Communications Devices: Type 2 – GPS/Vehicle Diagnostic (including but not limited to cabling, antenna and mounting).	\$ <u>445</u> (Sprint) (see options for AT&T)	\$ <u>44,500</u>
8.	1	EA	Vendor Installation of Type 2 Vehicle Communications Device.	\$ <u>120/unit</u>	\$ <u>120</u>



B. On-going Costs (Proposer shall complete this section only if offering a Hosted Solution)					
Item No.	QTY	U/M	Description	Unit Price - Fully Burdened Cost	Extension (Qty. x Fully Burdened Unit Cost)
9.	100	EA	Vehicle Communications Device -- Type 3 - GPS battery powered (non-vehicular).	\$ 445 (Sprint) (see options for AT&T)	\$ 44,500
10.	1	EA	Vendor Installation of Type 3 Vehicle Communications Device.	\$ 120/unit	\$ 120
11.	100	EA	Removal of Vehicle Communication Devices (All Types)	\$ 120/unit	\$ 12,000
12.	100	EA	Replacement of Vehicle Communication Devices (All Types)	\$ 120/unit	\$ 12,000
13.	100	EA	Remove and replace device from old vehicle to new vehicle.	\$ 240/unit	\$ 24,000
14.	1	HR	Technical Services offsite. (Attach additional documentation, if necessary)	\$ _____	\$ 0
15.	1	HR	Technical Services onsite (San Diego). (Attach additional documentation, if necessary).	\$ 125	\$ 125
16.	1	HR	Ongoing Hardware Maintenance.	\$ _____ warranty	\$ 0
<b>TOTAL:</b>					\$ 208,585

C. On-going Costs: (Proposer shall complete this section only if offering a In-House Solution)					
Item No.	QTY	U/M	Description	Unit Price - Fully Burdened Cost	Extension (Qty. x Fully Burdened Unit Cost)
1.	1	EA	In-house GPS/AVL Software Solution.  Note: If offering an in-house solution, the proposer must include with their proposal detailed documentation specifying all system requirements for evaluation.	\$ <u>125,000</u>	\$ <u>125,000</u>
2.	1	YR	Support and Maintenance Service	\$ <u>25,000</u>	\$ <u>25,000</u>
3.	100	EA	License per user  Note: Proposer must provide price breakdown if price changes based on varying quantities.	\$ <u>0</u>	\$ <u>0</u>
4.	100	EA	License per vehicle  Note: Proposer must provide price breakdown if price changes based on varying quantities.	\$ <u>96/year</u> \$ <u>8/month</u> per vehicle	\$ <u>9,600</u>
5.	100	EA	Vehicle Communications Devices: Type 1 – GPS/Vehicle Diagnostics/16 Sensor (including cables, antennas and mounting brackets).	\$ <u>495</u> (Sprint) (see options for AT&T)	\$ <u>49,500</u>
6.	1	EA	Vendor Installation of Type 1 Vehicle Communications Device.	\$ <u>120/unit</u>	\$ <u>120</u>

C. On-going Costs: (Proposer shall complete this section only if offering a In-House Solution)					
Item No.	Estimated Quantity	U/M	Description	Unit Price - Fully Burdened Cost	Extension (Qty. x Fully Burdened Unit Cost)
7.	100	EA	Vehicle Communications Devices: Type 2 – GPS/Vehicle Diagnostic (including but not limited to cabling, antenna and mounting).	\$ 445 (Sprint) (see options for AT&T)	\$ 44,500
8.	1	EA	Vendor Installation of Type 2 Vehicle Communications Device.	\$ 120/unit	\$ 120
9.	100	EA	Vehicle Communications Device – Type 3 - GPS battery powered (non-vehicular).	\$ 445 (Sprint) (see options for AT&T)	\$ 44,500
10.	1	EA	Vendor Installation of Type 3 Vehicle Communications Device.	\$ 120/unit	\$ 120
11.	100	EA	Removal of Vehicle Communication Devices (All Types)	\$ 120/unit	\$ 12,000
12.	100	EA	Replacement of Vehicle Communication Devices (All Types)	\$ 120/unit	\$ 12,000
13.	100	EA	Remove and replace device from old vehicle to new vehicle.	\$ 240/unit	\$ 24,000
14.	1	HR	Technical Services offsite. (Attach additional documentation, if necessary)	\$ 125/hr	\$ 125

C. On-going Costs: (Proposer shall complete this section only if offering a In-House Solution)					
Item No.	Estimated Quantity.	U/M	Description	Unit Price - Fully Burdened Cost	Extension (Qty. x Fully Burdened Unit Cost)
15.	1	HR	Technical Services onsite (San Diego).  (Attach additional documentation, if necessary)	\$ 125/hr	\$ 125
16.	1	HR	Ongoing Hardware Maintenance.	\$ warranty	\$ 0
<b>TOTAL:</b>					\$ 346,710

D. As-Needed, On-going Costs:					
Item No.	QTY	U/M	Description	Unit Price - Fully Burdened Cost	Extension (Qty. x Fully Burdened Unit Cost)
1.	1	HR	Additional long-term development services for out of scope future enhancements.	\$	\$ 0
<b>TOTAL:</b>					\$ 0

Note: For items requiring the Contractor to travel to designated work area(s) in the City of San Diego in order to fulfill the terms of this Contract, the City may reimburse the Contractor for travel and associated expenses in accordance with City's policy for reimbursement of travel and expenses.



RSI AVL OPTIONS				
quantity		per unit		total
100	<b>AT&amp;T GPRS Wireless Data Monthly Fee Option</b> Assumes 2 minute update rate plus stops, starts & ignition events Per vehicle per month Other update rates available.	\$	8.50 each	\$ 850
100	<b>TYPE 1- RSI MOBILE UNITS (AT&amp;T GPRS)</b> Mobile Units Configured for public data network (GPRS) Includes: GPS/RF Antennas, Mount, and Cabling <b>Diagnostics &amp; 16 sensor inputs</b>	\$	395 each	\$ 39,500
100	<b>TYPE 2- RSI MOBILE UNITS (AT&amp;T GPRS)</b> Mobile Units Configured for public data network (GPRS) Includes: GPS/RF Antennas, Mount, and Cabling <b>Diagnostics only</b>	\$	295 each	\$ 29,500
100	<b>TYPE 3- RSI MOBILE UNITS (AT&amp;T GPRS)</b> Mobile Units Configured for public data network (GPRS) Includes: GPS/RF Antennas, Mount, and Cabling <b>Battery Powered</b>	\$	245 each	\$ 24,500
100	<b>RSI MOBILE UNITS (3G)</b> Mobile Units Configured for AT&T, Sprint or Verizon 3G Includes: GPS/RF Antennas, Mount, and Cabling	\$	695 each	\$ 69,500
100	<b>RSI MOBILE UNITS (3G + WIFI)</b> Mobile Units Configured w WiFi Hotspot for AT&T, Sprint or Verizon 3G Includes: GPS/RF Antennas, Mount, and Cabling	\$	995 each	\$ 99,500
100	<b>RSI MOBILE UNITS (4G LTE)</b> Mobile Units Configured w WiFi Hotspot for Verizon 4G LTE Includes: GPS/RF Antennas, Mount, and Cabling Available Q2/Q3 2012	\$	1,295 each	\$ 129,500
100	<b>MAGNETIC CARD STRIPE READER</b> For Driver Identification	\$	95 each	\$ 9,500
100	<b>RF ID READER</b> For Driver Identification	\$	225 each	\$ 22,500
100	<b>RSI CUSTOMIZED GARMIN NUVI MDTs w/ Navigation</b> Customized messaging and navigation device Includes Mount, Cabling, & Customization	\$	625 each	\$ 62,500
100	<b>Emergency Buttons</b> Hard-wired On-Vehicle Button	\$	95 each	\$ 9,500
100	<b>Emergency Buttons</b> Wireless Handheld Medallion	\$	150 each	\$ 15,000
100	<b>EXTENDED ANNUAL WARRANTY ON HARDWARE (per unit)</b> Past year one.	\$	19 each	\$ 1,900

**CONFIDENTIAL**

Service Fees to be paid annually in advance.

Does not include applicable sales tax.

Includes all manuals and documentation

FOB Destination

## Radio Satellite Integrators

City of San Diego RFP No. 10022954-12-Z

### B. PRICE SCHEDULE – RSI Additional Items

ADDITIONAL ITEMS					
ITEM NO.	QTY.	U/M	Description	Unit Cost	Extension
1	3	EA	RSI's costs associated with Interfacing RSI AVL data to ESD's three specifically outlined applications (ARTS, FSD, and Routing) as per discussions between RSI and the City.	\$30,000	\$90,000
2	1	EA	OBDII cable (Add-on) Necessary for mobile units that do not have OBDII capability.	\$85	
3	1	EA	Non-coordinate OBDII cable installation. Installation of OBDII cable if done separately from the installation of the mobile unit.	\$95	
4	1	EA	Type 1 LMU 4200 Sprint OBDII/JBus + 16 sensors	\$495	
5	1	EA	Type 1 LMU 4200 ATT OBDII/JBus + 16 sensors	\$395	
6	1	EA	Type 2 LMU 3000 Sprint OBDII only	\$445	
7	1	EA	Type 2 LMU 3000 ATT OBDII only	\$295	
8	1	EA	Type 2 LMU 2720 Sprint OBDII/JBus + 5 sensors	\$445	
9	1	EA	Type 2 LMU 2720 ATT OBDII/JBus + 5 sensors	\$295	
10	1	EA	Type 3 LMU 2720 Sprint Added Battery	\$445	
11	1	EA	Type 3 TTU 1210 ATT Battery power (AT&T)	\$245	
12	1	EA	"GPS Logic" Vanguard 3000 3G – GOBI - WiFi	\$599	
13	1	EA	Mobile Unit integration to existing sensor on vehicle.	No charge	
14	1	EA	Additional Sensor hardware (e.g. magnetic proximity sensors or hydraulic pressure sensors). RSI can train City staff on install but will not be required to do the actual installation.	\$25-\$100	
15	1	EA	RSI portion of interface to AssetWorks Fleet Focus system. Does not include any charges or costs required by AssetWorks.	No charge	

### RSI Provided (AT&T) Wireless Data Matrix

These are the default reporting rates in addition to the position/status data sent upon: ignition on/off, stops, starts, turns, and events.

<b>Update Rate</b>	<b>Monthly Per Unit Cost</b>
15 seconds	\$12.50
30 seconds	\$11.00
1 minute	\$9.50
<b>2 minutes</b>	<b>\$8.50</b>
Trailer/Equipment- 1 per day + movement*	\$7.50
Armature Lift Sensor (add to above)	\$5.00
OBD-II data (add to above)	\$1.00

Note: Prices are in addition to any monthly software costs.

\*Note: This is the only reporting configuration possible for trailer units.

## SECTION C

### SCOPE OF SERVICES

#### A. BACKGROUND

The City of San Diego (City) owns and operates a vehicle fleet of 4,050 vehicles consisting of motorcycles, parking enforcement scooters, sedans, law enforcement vehicles, light trucks/vans, medium/heavy duty trucks, fire apparatus, refuse collection trucks, street sweepers, trailers, tractors and industrial equipment. These vehicles support all City services, are assigned to several departments and primarily operate within the city and county of San Diego. The City desires to optimize its vehicle and staff resources by procuring and installing an Automated Vehicle Location (AVL)/ Global Positioning System (GPS) to improve vehicle utilization, employee productivity and safety.

The City of San Diego currently operates several existing AVL/GPS systems including the Police, Fire, Environmental Services and Public Utilities departments. These existing systems represent a variety of components, configurations, complexity and operating characteristics and are independently operated to provide specific data related to each organization's operational needs. The current number of City vehicles with existing AVL/GPS technology is approximately 2,000 leaving approximately 1,800 vehicles that will require future installation of AVL/GPS units.

The goal of this project is to ultimately equip the majority of City vehicles with AVL/GPS technology based on current and future operational needs as well as funding availability. Additionally, the City desires to procure a system that has the capability to track mobile, non-vehicular assets such as laptop computers and cell phones.

It is the intent of this Scope of Work (SOW) of this RFP to acquire the software and hardware necessary to establish an Automated Vehicle Location (AVL)/Global Positioning System (GPS) for City vehicles that do not currently have AVL/GPS systems. The system will: 1) monitor and report vehicle location, heading and usage information (real time **and historical**), 2) provide supervisory/ management staff with vehicle usage information, 3) provide vehicle operating data such as drive train diagnostics/idle time/odometer readings and 4) record and report ancillary equipment usage such as sweeper broom up/down or police siren on/off, etc.

The system envisioned by this SOW will be one that:

1. Provides state of the art, web based AVL/GPS technology and related reporting features.
2. Provides communications via multiple sources – cellular, WiFi, satellite and 2-way radio systems
3. Provides a centralized and secure AVL/GPS mobile asset “data repository” with departments having the capability to extract information relative to their needs and specific assets.



4. Provides the ability to leverage the City's existing ESRI ArcGIS (release 10) mapping technology including GIS data available through the City's spatial data warehouse.
5. Application must be compatible with Microsoft 2008 server operating system and Windows 2007 / Microsoft XP desktop operating systems.
6. Provides the capability to capture and report vehicle diagnostic information including mobile emissions testing data per the requirements of the State of California
7. Provides flexible and user defined data capture reporting and reporting periods
8. Provides data integration and compatibility with the City's existing Asset Works/Fleet Focus fleet management information system.
9. Provides ease of use including standardized viewing screens,
10. Provides data view/access via desktop and mobile devices-
11. Provides on-site and off-site product support including local (San Diego) vehicle unit installation services as well as routine and warranty maintenance services by an established vendor
12. Provides the flexibility to integrate AVL/GPS data generated from the legacy systems.
13. Provides remote user administration tools for generating event notification, alarms and geofences.
14. Provides remote user administration tools for managing report access and assigning security for data access.
15. Provides **for modem replacement within 24 hours** and an expectation of **98% of installed devices** at all times.
16. Provides the ability to migrate the AVL application to an in-house hosting environment should the City initially select a vendor hosted solution for a specified time period.

For information purposes, this Contract is funded by City of San Diego Master Lease Financing Program.

**B. OBJECTIVE**

The objective of this RFP is to make an award to a qualified Contractor which delivers an Automated Vehicle Location (AVL)/Global Positioning System (GPS) that represents best overall value to the City, while meeting or exceeding the specifications and requirements of this RFP.

**C. CORE REQUIREMENTS AND DELIVERABLES**

The minimum requirements of the aforementioned AVL/GPS system are:

**1. System Architecture**

<b>ITEM</b>	<b>FUNCTION</b>	<b>MANDATORY</b>	<b>DESIRABLE</b>
<b>a.</b>	<b>The system must accommodate an unbundled and open standard solution (e.g. wireless carrier, hardware devices and existing systems).</b>	<b>X</b>	
<b>b.</b>	<b>The proposer must delineate between a in-house and hosted solution.</b>		<b>X</b>
<b>c.</b>	<b>The system must integrate with the City's existing Assetworks/Fleet Focus management information system.</b>	<b>X</b>	
<b>d.</b>	<b>The system runs on a platform that will operate with current and future software updates and security patches.</b>		<b>X</b>
<b>e.</b>	<b>The system has capability to be deployed using City infrastructure.</b>		<b>X</b>
<b>f.</b>	<b>The system must leverage existing City GPS systems by aggregating data from new and existing mobile devices to a centralized AVL (automatic vehicle location) and fleet reporting system</b>	<b>X</b>	
<b>g.</b>	<b>Users must be able to access the system via a web-based interface.</b>	<b>X</b>	
<b>h.</b>	<b>The system provides on-line help.</b>		<b>X</b>
<b>i.</b>	<b>The system must monitor vehicle position in real-time (e.g. location, heading, last operated, status).</b>	<b>X</b>	

ITEM	FUNCTION	MANDATORY	DESIRABLE
j.	The system must capture and/or calculates vehicle status (vehicle idle time, on/off, etc.)	X	
k.	The system must capture vehicle usage (mileage and/or hours).	X	
l.	The system must have the ability to regulate frequency of data gathering and reporting in increments from 1 second to 1 day intervals.	X	
m.	The system must be capable of handling 400+ events (on average) every 15 seconds.	X	
n.	The system must capture GPS modem time (i.e. time telemetry data are collected) and system update time (i.e. time data are inserted into the database).	X	
o.	The system interface supports XML format.		X
p.	The system pushes work orders or other messages [down] to specific devices.		X
q.	The system must support the integration of third-party applications by allowing the updating and retrieval of data elements and attributes such as operator, supervisor, vehicle, location, route, status, type, assignments, etc, via a real-time web service interface.	X	
r.	The system supports direct SQL access to data.		X
s.	The system must support the extraction of data using criteria such as vehicle, route, supervisor, date, time, location, event, or alarm.	X	

ITEM	FUNCTION	MANDATORY	DESIRABLE
t.	The system shall not be limited by floating and/or seat licenses. Licensing is unlimited and concurrent.		X
u.	The system is capable of sending email alerts to multiple recipients when select events occur.		X
v.	The system must be compatible with the City's long range commercial wireless services to use Sprint.	X	

2. Security/Administration

ITEM	FUNCTION	MANDATORY	DESIRABLE
a.	The system must maintain security by requiring users to enter a user name and a complex password at log in. Password must expire according to City standard regulations.	X	
b.	The system integrates with Active Directory (AD) for user authentication and authorization.		X
c.	The system must support role-based access to data, functionality, displays, and reports.	X	
d.	The system must filter vehicles into certain groups (i.e. Supervisors can see only his/her vehicles, District Managers can see vehicles that belong to their Supervisors, Deputy Directors can see vehicles that belong to their District Managers) via the dynamic integration of 3rd party applications.	X	
e.	The system provides audit capability including logging date, time and user IDs for adds, changes and deletes.		X
f.	The system must provide a web-based administration console.	X	
g.	The system must provide administrative tools that allow:		

ITEM	FUNCTION	MANDATORY	DESIRABLE
	1) Ability to add, modify and delete vehicles.	X	
	2) Ability to segregate data and reports.	X	
h.	The proposed solution must have the capability to retain AVL/GPS records indefinitely.	X	
i.	The proposed solution must provide immediate access to the AVL/GPS records for 1 year at minimum (from current date).	X	
	1) Ability to add, modify and delete users and roles.	X	
	2) Ability to monitor system performance and troubleshoot problems.	X	
h.	The system provides a safe method of establishing communication from the mobile device to the server:		
	1) Ability to establish communication via outbound network connection initiated by the City.		X
	2) System must have built in security controls to provide safe communication.	X	

3. GIS/Navigation/Mapping

ITEM	FUNCTION	MANDATORY	DESIRABLE
a.	GIS viewer optimized for mobile devices (i.e. smartphones, Ipad, etc) is available.		X
b.	The system must integrate spatial data published from the City's (multiple) ESRI Enterprise Spatial Data Warehouse (SDW).	X	
c.	The system accesses GIS data from a web service or directly from the City's ESRI spatial data warehouses.		X

ITEM	FUNCTION	MANDATORY	DESIRABLE
d	The system must be compatible with ESRI standard data formats, CADD DWG & DXFs.	X	
e	The system must provide geo-fencing capability.	X	
f	The system must provide in-stream reverse geocoding. All telemetry data retains an address. Batch/post processing is provided if real-time in-stream geocoding is not available for all telemetry data.	X	
g	The system provides vehicle activity replay by user specified parameters including date, time, vehicle(s) and crew(s).		X
h	The system must symbolize according to alerts (i.e. speeding vehicle, idle vehicles, armlifts, etc.)	X	
i	The system provides turn-by-turn driving directions:		
	1) Add stops or barriers		X
	2) Import stops or barriers from file		X
	3) Calculate shortest route by time or distance		X
	4) Provide list of driving directions		X
	5) Zoom to location on map from list		X
	6) Right-turn only for route planning and driving directions		X
j	The system must display last current vehicle location (deltas) for real-time use.	X	
k	The system must provide multiple methods for moving around the map including mouse or other pointing device and keyboard	X	
l	The system must provide a map based presentation layer with standard spatial functions and basic analysis:		

ITEM	FUNCTION	MANDATORY	DESIRABLE
	1) Navigation Tools: Zoom in	X	
	2) Navigation Tools: Zoom out	X	
	3) Navigation Tools: Previous extent	X	
	4) Navigation Tools: Full extent	X	
	5) Navigation Tools: Pan	X	
	6) Tools: Refresh/redraw	X	
	7) Tools: Search (i.e. find parcel, address, road name, vehicles, routes, zones, events, etc)	X	
	8) Tools: Proximity, find closest vehicle to location or feature	X	
	9) Tools: Measure distance and area		X
	10) Tools: Identify map features	X	
	11) Map content: Display vehicle bread crumb trail	X	
	12) Map content: Change layer visibility	X	
	13) Map content: Quick themes to allow users to quickly add commonly used themes		X
	14) Map content: Layer transparency	X	
	15) Map content: Reorder map layers		X
	16) Map content: Add layers from predefined list		X
	17) Map content: Remove layers		X
	18) Map content: Display vehicle detail when mouse over icon	X	
	19) Map content: Save and load current map settings		X
	20) Map content: Maintain multiple personal map settings and only display by user account		X
	21) Map content: Dynamic map legend	X	
	22) Map content: Provide access to metadata	X	

ITEM	FUNCTION	MANDATORY	ITEM
	23) Overview map	X	
	24) Markup Tools: point	X	
	25) Markup Tools: polygon	X	
	26) Markup Tools: poly-line	X	
	27) Markup Tools: circle	X	
	28) Markup Tools: text	X	
	29) Markup Tools: erase	X	
	30) Spatial Operations: select feature(s) by mouse click	X	
	31) Spatial Operations: select feature(s) multi-vertex straight line	X	
	32) Spatial Operations: select feature(s) by freehand line	X	
	33) Spatial Operations: select feature(s) by multi-vertex polygon	X	
	34) Spatial Operations: select feature(s) by freehand polygon	X	
	35) Spatial Operations: clear selected feature(s)	X	
	36) Extract: Create extent for extract	X	
	37) Extract: Clear extent	X	
	38) Extract: Export selected data to designated format (i.e. shapefile, csv, txt)	X	
	39) Print: Standard map by orientation (i.e. Landscape, portrait) with legend, north arrow, visible map layers, user defined print quality and user defined title	X	
	40) Print: Route maps book pages with index		X
	41) The system provides a map based presentation layer with advanced spatial functions and analysis:		
	i. Tools: Create, modify and delete spatial bookmarks		X



ITEM	FUNCTION	MANDATORY	ITEM
	ii. Tools: feature (i.e. parcels, customers) count by defined geographical area		X
	iii. Tools: Route optimization and driving directions		X
	iv. Map Content: Visualize participation or percentage of route collected		X
	v. Map Content: Symbolizes travel path by load		X
	vi. Map Content: Track vehicles where selected vehicle(s) remain centered on map		X
	vii. Map Content: RSS feed of real time traffic conditions		X
	viii. Geoprocessing: Buffer by user-defined or pre-defined distance	X	
	ix. Geoprocessing: Calculate proximity of vehicle(s) to user-identified feature(s)	X	
	x. Vehicle Data extract: By current map extent	X	
	xi. Vehicle Data extract: By rectangular selection tool	X	
	xii. Vehicle Data extract: By buffer	X	
	xiii. Vehicle Data extract: By irregular polygon selection tool	X	
	xiv. Generate summary statistics by polygon: Sum		X
	xv. Generate summary statistics by polygon: Mean		X
	xvi. Generate summary statistics by polygon: Standard Deviation		X
	xvii. Print: Route maps book pages with index		X
	xviii. Print: Maps in customer-defined layout		X
l.	The system must display vehicle(s) and non-motorized asset(s) on a map using Department and City approved conventions and symbology.	X	
m.	The system allows users to set preferences controlling how map data are symbolized.		X

ITEM	FUNCTION	MANDATORY	ITEM
n.	The system must export maps in PDF, JPEG format.	X	

4. Vehicle Communication Devices (VCDS)

ITEM	FUNCTION	MANDATORY	DESIRABLE
a.	The VCDs must support non-motorized vehicles / assets including rechargeable battery(s) with 6 month life and low battery alert message.	X	
b.	The system has software that allows for inventory, firmware, and configuration management of VCDs and attached sensors.		X
c.	The VCD must be programmable over the air (OTA) or via an on-board interface (serial, ethernet, usb).	X	
d.	The VCDs must have the ability to capture and report GPS, Vehicle Diagnostic and Sensor data in real time, and store and forward.	X	
e.	The VCD must be able to transmit data at 5-second intervals and at every telemetry event.	X	
f.	The VCDs must interface with OBDII, J-1708 and J-1939 to monitor:		
	1) PTO (power take-off)	X	
	2) Power train	X	
	3) Idling	X	
	4) Emissions status	X	
	5) Fuel efficiency	X	

ITEM	FUNCTION	MANDATORY	ITEM
g.	The VCD must have the capability to support remote sensors and up to 16 inputs (analog and/or digital), including telemetry data such as trash collection arm cycles, doors open, siren on/off, etc.	X	
h.	The VCD has visual indicators or mechanisms to prevent and/or deter tampering.		X
i.	The VCD has programming flexibility to support hibernation, wake on call and other ignition on/off behavior.		X
j.	The VCD has capability of parsing and sending the data to various appropriate applications.		X

5. Reporting

ITEM	FUNCTION	MANDATORY	DESIRABLE
a.	The system reporting function should be available 99% of the time from any computer with City intranet/internet access.		X
b.	The system must export data to Microsoft Excel, XML, and/or CSV format.	X	
c.	The system must provide a Detailed Summary Report by vehicle and user specified date/time period.	X	
d.	The system provides a Duration Report that computes the elapsed time between two statuses such as time spent at site or on the road.		X
e.	The system must provide an Exception Report that lists all recorded exception conditions.	X	
f.	The system must provide a Location Event Report which shows the location for selected vehicle(s) by a user specified date/time period	X	

ITEM	FUNCTION	MANDATORY	ITEM
g.	The system provides an Off/Out of Service Summary Report that lists the times and duration a vehicle is off/out of the service area.		X
h.	The system provides a Detailed Routing Report to include:		
i.	1) Total stops		X
	2) Total drive time		X
	3) Total breaks		X
j.	The system provides a Route Compliance Report which details time and miles spent by a vehicle within/outside of a specified distance from a predefined route/path.		X
k.	The system provides a Stationary Summary Report which lists the location and vehicle number for all vehicle(s) that exceeded preset stationary vehicle time parameter.		X
l.	The system must provide a Vehicle List Report of active vehicles.	X	
m.	The system must provide an Authorized Personnel Report which lists authorized viewers, roles and rights to the AVL system.	X	
n.	The system provides a Detailed Speed Report for user-specified vehicle(s) by date/time:		
	1) Real time speed		X
	2) Average speed		X
	3) Maximum speed		X
o.	The system must provide a Diagnostic Summary Report which includes a list of diagnostic information used to determine preventative maintenance (PM) schedule.	X	

ITEM	FUNCTION	MANDATORY	ITEM
p.	The system provides a Miles Driven Report which includes total miles driven user defined time period (i.e. by day, week, month, quarter, year), average miles driven by user defined time period, and comparison of miles driven for multiple vehicles		X
m.	The system must provide an Authorized Personnel Report which lists authorized viewers, roles and rights to the AVL system	X	
n.	The system will provide a Detailed Speed Report for user specified vehicle(s) by date/time: <ul style="list-style-type: none"> <li>• Real time speed</li> <li>• Average speed</li> <li>• Maximum speed</li> </ul>		X
o.	The system must provide a Diagnostic Summary Report which includes a list of diagnostic information used to determine preventative maintenance (PM) schedule	X	
p.	Ability to calculate and report estimated environmental impact information such as carbon footprint, greenhouse gas emissions, etc.		X

6. GPS Hardware Maintenance/Provider Performance

ITEM	FUNCTION	MANDATORY	DESIRABLE
a.	The provider is responsible for creating and modifying VCD programming scripts based on departmental requirements.		X
b.	The provider is responsible for keeping all VCDS up to date in regards to firmware releases from the manufacturer.		X

ITEM	FUNCTION	MANDATORY	ITEM
c.	The provider is responsible for VCD inventory and maintains a database of assigned units. This also includes but not limited to IMEI, ESN, Wireless account numbers, IP addresses.		X
d.	The provider will ensure spare VCDs are readily available at all times in any event that units need to be swapped out.		X
e.	The provider supplies the VCDs preconfigured upon request.		X
f.	The provider includes all necessary hardware components to facilitate a complete vehicle installation.		X
g.	The provider is responsible for all troubleshooting aspects of faulty VCDs, which includes bench testing and coordinating with the manufacturer for repairs.		X
h.	The provider maintains and stores physical inventory of spare VCD equipment, including but not limited to modems, antennae, wiring, cabling, and switches.		X
i.	The provider installs, maintains, and upgrades VCDs and attached hardware.		X

7. Query/Search

ITEM	FUNCTION	MANDATORY	DESIRABLE
a.	The system can access and retrieve unlimited historical data.		X
b.	The system must provide ad-hoc, custom search capability	X	
c.	The system must provide pre-defined searches:		
	1) By vehicle ID(s)	X	

ITEM	FUNCTION	MANDATORY	ITEM
	2) By group or section	X	
	3) By alert or event(s)	X	
	4) By address(es) or Intersection(s)	X	
	5) By parcel(s)	X	
	6) By work order(s)		X
	7) By crew(s)	X	
	8) By date	X	
	9) By date range	X	
	10) By week	X	
	11) By commodity/material type	X	
	12) By arm lifts per route hour		X
	13) By route	X	
d.	The system must provide minimum of 6 months of historical data that may be visualized through the GIS viewer in support of accident investigations and fact findings	X	
e.	The system must provide minimum of 1 year of historical data accessible through standard and ad hoc reports in support of accident investigations, fact findings and planning	X	

H. VOLUNTARY PRODUCT ACCESSIBILITY TEMPLATE (VPAT)

It is highly desirable that contractor provide a Voluntary Product Accessibility Template (VPAT) with their response, to assist the city in making preliminary assessments regarding section 508 accessibility of their products and services. The VPAT template is provided by the information technology industry council at:  
<http://www.itic.org/index.php?submenu=resources&src=gendocs&ref=vpap&category=resources#1194.22>.

I. PROTECTION OF SENSITIVE INFORMATION AND DATA

The Contractor, its agents, employees, Contractors and any other person or entity working on behalf of the Contractor to provide services under this Contract shall at all times comply with City of San Diego Administrative Regulation (A.R.) 90.64, "Protection of Sensitive Information and Data," attached hereto and incorporated herein by this reference.

J. USE OF STANDARDS

The proposed system solution must be "ADA compliant" by following the U.S. federal standards set forth in the "Electronic and Information Technology Accessibility Standards" (Section 508), found at: <http://www.accessboard.gov/sec508/standards.htm>, and with the international standards set by the World Wide Web Consortium (W3C), found at: <http://www.w3.org/WAI/guidtech.html>.



Contractor must specify the minimum and recommended computer environment (hardware and software) which are necessary for the proposed system solution to function as required in these specifications. Contractor must also specify whether the proposed system solution will operate in a virtual computing environment (the City uses VMWare ESX v.3.5) and define the minimum and recommended configurations.

G. TRAINING

Contractor must provide Standard On-Site training to City staff in the setup, configuration, and use of the proposed system, which shall include instructor-led courses at a City facility. Contractor must provide, in the Proposal Package, options for the standard number of training hours normally provided for the proposed system solution, and include the costs for each training option separately. In addition to the required Standard On-Site training, Contractor may also include additional training options to City staff in the setup, configuration, and use of the proposed system, such as Self-Paced, On-Site Computer-Based training which includes computer-based training using delivered media (CD/DVD or server-installable training package), online/web-based training, and/or offsite training to include instructor-led courses (at another facility). The Contractor shall provide the City with copies of training manuals to cover basic through advanced system usage, system administration, and system configuration, which must include one set/copy in paper format and another set/copy to be in a digital format usable by the City (e.g. Microsoft Office products or Adobe Acrobat).

H. LICENSES

The City anticipates approximately one hundred (100) concurrent user licenses and approximately five hundred (500) total users. The City reserves the right to have additional users use the system on a case by case basis. The Contractor must include in the Proposal Package, a copy of their applicable software license agreement, which must contain the right for the City to make backup/archival copies of the system software for disaster recovery purposes. The City reserves the right to review and recommend modifications to the software license agreement, in the event any terms and conditions do not comply with any legal requirements to which the City is obligated. The City anticipates that the Contractor will license the use of the proposed system solution to the City, and that the Software Manufacturer will retain ownership of the software. Ownership of any updates to the COTS system software shall also remain with the Software Manufacturer. Any data entered or imported into the system solution by the City is and will remain the sole property of the City and no rights of ownership shall pass to the Contractor.

**I. MAINTENANCE, SUPPORT AND UPDATES**

Contractor must include in the Proposal Package a description of system support and maintenance options available to the City, to provide for the necessary ongoing support services, including but not limited to technical assistance via telephone during business hours (8:00am – 5:00pm Pacific Time), online self-service, and Email to technical support staff; and for providing periodic system software updates, patches, and minor upgrades as part of an annual software maintenance agreement, which may be executed concurrently with this contract or separately. Support and maintenance services may be offered on a tiered basis, where Contractor identifies the options for response times and problem resolution times at different cost levels (e.g., Platinum, Gold or Silver service levels). Contractor must provide separate costs for such support and maintenance services as part of the Pricing Submittal.

**J. WARRANTY**

The warranty should cover parts and labor, duration, repair or replacement, shipping, etc. The Contractor must include in the Proposal Package, a copy of the applicable Warranty for the proposed system solution. The Contractor must agree that the Warranty period will not commence until after successful installation and implementation of the proposed system solution, as evidenced by a signed Customer Acceptance from the City. The City reserves the right to review and recommend modifications to the Warranty that may be necessary for the City to maintain compliance with any legal requirements.

**K. QUALITY CONTROL**

Contractor must provide sufficient certification of the quality and usability of the proposed system solution, as part of the Warranty, to be approved by the City during the final Customer Acceptance Testing.

**L. INSTALLATION, TESTING AND ACCEPTANCE**

**In terms of hardware and software, the contractor is responsible for installation, testing, and acceptance of each component, including 1) unpacking the equipment, assembling it and installing the most current version of necessary software; 2) performing all diagnostics and hardware “burn-in”; 3) demonstrating that each unit is functioning by sending sample data through each physical interface as requested by the City. The vendor is responsible to identify any compatibility requirements such as electrical, water, structural, telephone, data, battery, and heating/cooling.**

In terms of the software, the Contractor is responsible for delivery, installation, and initial testing of the proposed system solution at the City’s designated data center site or hosted site. Should the City select the in-house solution, the Contractor must include in the Proposal Package, a detailed system configuration description for the computer hosting environment on which the proposed system solution is recommended to be installed. Contractor may optionally include, as part of the Proposal Package, the necessary hardware and software with associated costs; however, the City reserves the right to

procure and/or provide the hardware platform/systems and related Operating Systems on which the proposed system solution will be installed outside of this agreement.

**PARAGRAPH DELETED.**

As part of the Project Plan, after execution of a base deliverables of the contract, the Contractor shall work with the City to develop a Customer Acceptance Testing Plan, which shall detail the necessary system functional testing required for the City to accept the proposed system solution for production use.

**M. SAFETY AND ACCIDENT PREVENTION**

All work completed by vendor on City property must comply with any Federal, State, County or Municipal safety and accident prevention requirements, including but not limited to, Occupational Safety and Health Administration (OSHA), a regulatory office of the US Department of Labor.

**N. PROJECT MANAGEMENT**

The Contractor shall designate a Project Manager/Lead who will oversee the Consultant's work to implement the proposed system solution. The designated Project Manager/Lead shall provide the City Project Manager with a proposed Project Plan as the first deliverable under this agreement. Under the direction of the City's Project Manager, the Consultant's designated Project Manager/Lead will direct the work required for successful system implementation. Consultant's Project Manager/Lead is responsible for managing, monitoring, and reporting to the City's Project Manager on the status of project tasks/schedule and budget

**O. DOCUMENTATION AND REPORTS**

Contractor shall provide the City with all necessary documentation related to the configuration, installation, implementation, support, and maintenance of the proposed system solution, during each phase of the implementation project as defined jointly with the City's Project Manager. Such delivered documentation shall become the property of the City, except for any portions that may contain Contractor's proprietary information, which must be clearly indicated as such.

**P. CONTRACTORS IMPLEMENTATION PLAN**

Assuming a Notice to Proceed is issued by April 1, 2012, implementation of the AVL solution must be completed prior to July 1, 2011. Based on this timeline, the Contractor shall include and implementation plan proposing procedural, operational steps, technical approach and milestones of how Contractor intends to provide the work plan with specified deliverables as previously specified. Any challenges or problems should be

identified. A revised schedule may be required from the Contractor within ten (10) calendar days of the City's notification of provisional award.

Q. CUSTOMER SERVICE

Contractor shall provide a customer service operation for City customers. The customer service operation shall include access to a local numbers 619, 858, and 760 or a toll free number and provision of an in-house Customer Service representative who is assigned and dedicated to the City. The in-house Customer Service representative shall be knowledgeable and responsive relative to contract and customer service issues and available to the City during regular working hours, Monday through Friday, 8:00 a.m. To 5:00 p.m.

R. COOPERATION AND TRANSITION

Contractor shall cooperate with the City at the expiration of the contract and the incumbent Contractor in order to accomplish a smooth phase-out and transition of responsibility and requirements, if applicable.

S. QUALIFICATIONS AND EXPERIENCE

To enable the City of San Diego to evaluate the responsibility, experience, skill, qualifications, and business standing of the Contractor, the following information must be included with the technical proposal:

1. Contractor shall provide a company/corporate organizational chart and staffing profile including subcontractors if applicable. The staffing profile shall include the leadership of the project team, the accountability of the Project Manager/Lead, the lines of authority and the identification of the day-to-day staff indicating by a percentage (%) as to whether they will be fully or partially assigned and dedicated to the Project. Contractor shall explain less than full time dedication or one hundred percent (100%) of any members of the project team.
2. Contractor shall provide background, knowledge, resumes, experience dealing with similar projects and years of tenure for key personnel who will be assigned and dedicated to the City's account. Project team personnel shall be assigned and dedicated to the City's account and shall not be substituted or replaced during the **term of the contract**.
3. Contractor shall provide the names and contact information including e-mail addresses of the key personnel assigned and dedicated to the City's account.
4. Contractor shall provide a dedicated Project Manager/Lead (key personnel) who has a minimum of three (3) years prior experience in similar contracts as specified in this RFP. Previous experience with public agencies is desirable.
5. Contractor shall clearly define what responsibilities the dedicated Project Manager/Lead project team member(s) and key personnel will be charged with relative to this project.

6. The dedicated Project Manager/Lead shall be accessible, at the minimum, by email and telephone, Monday through Friday between the hours of 8:00 a.m. and 5:00 p.m., Pacific Time excluding the most recently published City holidays as specified on the City's internet site [www.sandiego.gov](http://www.sandiego.gov)

T. SERVICES (AS NEEDED)

The City of San Diego may require additional technical services related to the scope of work such as custom programming, system design, system integration, custom reports, etc. The cost of technical services for custom work requested by the City Contract Administrator should be included in the pricing schedule.

Additional technical services shall not include resources required for the initial implementation of the proposed AVL application.



**Radio  
Satellite  
Integrators, Inc.**

**City of San Diego**  
**RFP# 10022954-12-Z**  
**GPS System**  
January 18, 2011



## **Title Page**

**Company:**

Radio Satellite Integrators, Inc.

**Contacts:**

Brett G. Lim

Director of Marketing

[blim@radsat.com](mailto:blim@radsat.com)

310.787.7700

19144 Van Ness Avenue  
Torrance, California 90501 USA

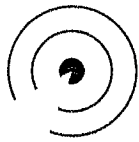
**Date:**

January 13, 2012

**Subject:**

RSI Response to City of San Diego RFP #10022954-12-Z: AVL/GPS System.





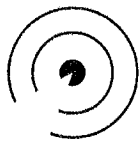
**Radio Satellite Integrators, Inc.**

**City of San Diego**  
**RFP# 10022954-12-Z**  
**GPS System**  
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## **Executive Summary**

### **Our Commitment**

Radio Satellite Integrators (RSI) has provided Automatic Vehicle Location (AVL) and mobile data systems that work to the highest levels of performance, reliability, and scalability since 1990. We are one of the oldest and most experienced AVL systems manufacturers and integrators in the industry and we have notable experience with local government and large enterprise systems. Radio Satellite Integrators stands ready to support our services and products with the high standards demanded by entities like the City of San Diego.

### **Our AVL Experience**

RSI has implemented over 250 AVL systems in several thousand vehicles and has the largest breadth of AVL experience of any company in the world. RSI leverages this real world experience with municipal and government fleets similar to City of San Diego to offer you the highest performing and most reliable systems on the market.

### **City of San Diego Objectives:**

The City of San Diego seeks an Automatic Vehicle Location system to meet the unique requirements of its vehicle and dispatch operations for its vehicles. In addition, the customer can have this enterprise system fully integrated with ESRI ArcGIS, work order, or other fleet management systems. These systems provide the customer with the tools for faster and more efficient dispatching along with real-time and historical data that can be used for a variety of administrative tasks or analysis.

City of San Diego desires to implement an AVL system to enhance the ability to efficiently manage the assignment of vehicle operations; to use the AVL and Mobile Data system to increase safety, productivity, and service to the citizens in your area of operations.

### **The RSI Solution:**

The RSI AVL system will establish a wireless gateway between your vehicle fleet and your base dispatch. The RSI AVL system will provide real-time vehicle location and status data on an ESRI ArcGIS Server based map interface (hosted servers).

An RSI Mobile unit will provide vehicle location and status data for the system as well as serve as the wireless link between vehicle and base. The mobile GPS device can be equipped with serial ports and sensors to integrate to virtually any devices and external status signals, such as ignition on/off, door open/shut, lights, arm, data terminal, navigation device, etc.



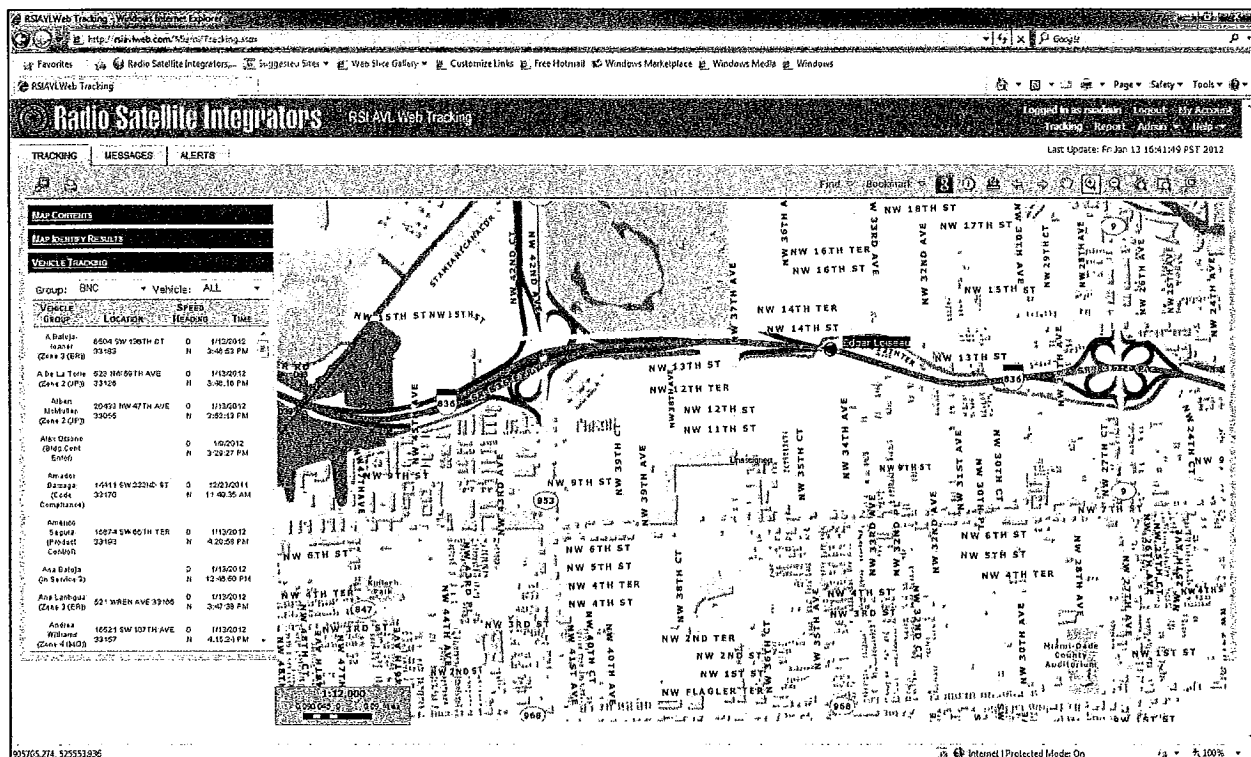


## RSI System Equipment

An RSI AVL solution consists of in-vehicle equipment and base applications and equipment. The ***In-Vehicle Equipment*** is centered on the RSI Mobile Unit, a self-contained unit integrating GPS location and sensor technologies, as well as wireless communications. The GPS unit can be connected to any devices or sensors including lights, ignition, doors open/closed, alarms, etc. In addition, any variety of in-vehicle computing devices such as Navigation Devices or MDT's can be connected to the mobile unit and mounted for a driver interface to the system in the future.

The ***Base Application*** is based on ESRI ArcGIS Server and can be implemented in a variety of configurations including either hosted or local Web browser based applications. Users interact with the system through industry-standard ESRI GIS mapping tools as well as customized reporting applications. The base application servers are typically hosted off-site by RSI.

The In-Vehicle Equipment and Base Application are linked via two-way cellular wireless communications, allowing for timely data transmission between the field and dispatch center.





### **Wireless Communications**

- **RSI can use virtually any wireless carrier for the communications portion of this system. As required and specified in the RFP, we will be proposing a system configured for the Sprint wireless network. Please note that devices using the AT&T network are significantly less expensive, so we are proposing these as an option.**

RSI has worked with more communications technologies in our 20 years of technology leadership than any other vendor in this marketplace. RSI AVL systems can use any type of public data network (cellular) including: GPRS, GSM, EV-DO, Nextel/iDEN, CDMA, and many others.

Using various types of mobile units, RSI also has the capability to field hybrid solutions, which use a combination of multiple communications mediums simultaneously such as satellite, WiFi, two-way radio, and others.

**Please see the Wireless Communications Section in the proposal.**



### Third Party System Integration

One of the main differences between RSI and other AVL providers is our unparalleled experience with integrating our AVL and mobile data systems with third party applications. RSI has worked with dozens of third party providers of scheduling, dispatch, work order management, maintenance, as well as "home-grown" applications for various agencies.

RSI has extensive experience interfacing with all types of third party applications such as:

- Work Orders
- Maintenance
- Scheduling
- Dispatch
- Routing
- GIS

RSI is able to leverage its vast engineering experience to allow for the easy integration and real-time sharing of all system data with third party applications. In addition, the RSI AVL system provides a wireless gateway for these systems to share and update data from a driver interface in the vehicle. RSI has written interface programs specific to a number of such applications (using methods such as COM/DCOM, ODBC, XML, SOAP, TCP/IP sockets, CORBA, data queues in an AS/400 environment, network files, etc.).

With dozens of customized integrated systems in place throughout the world, full system integration is just par for the course with the RSI system.

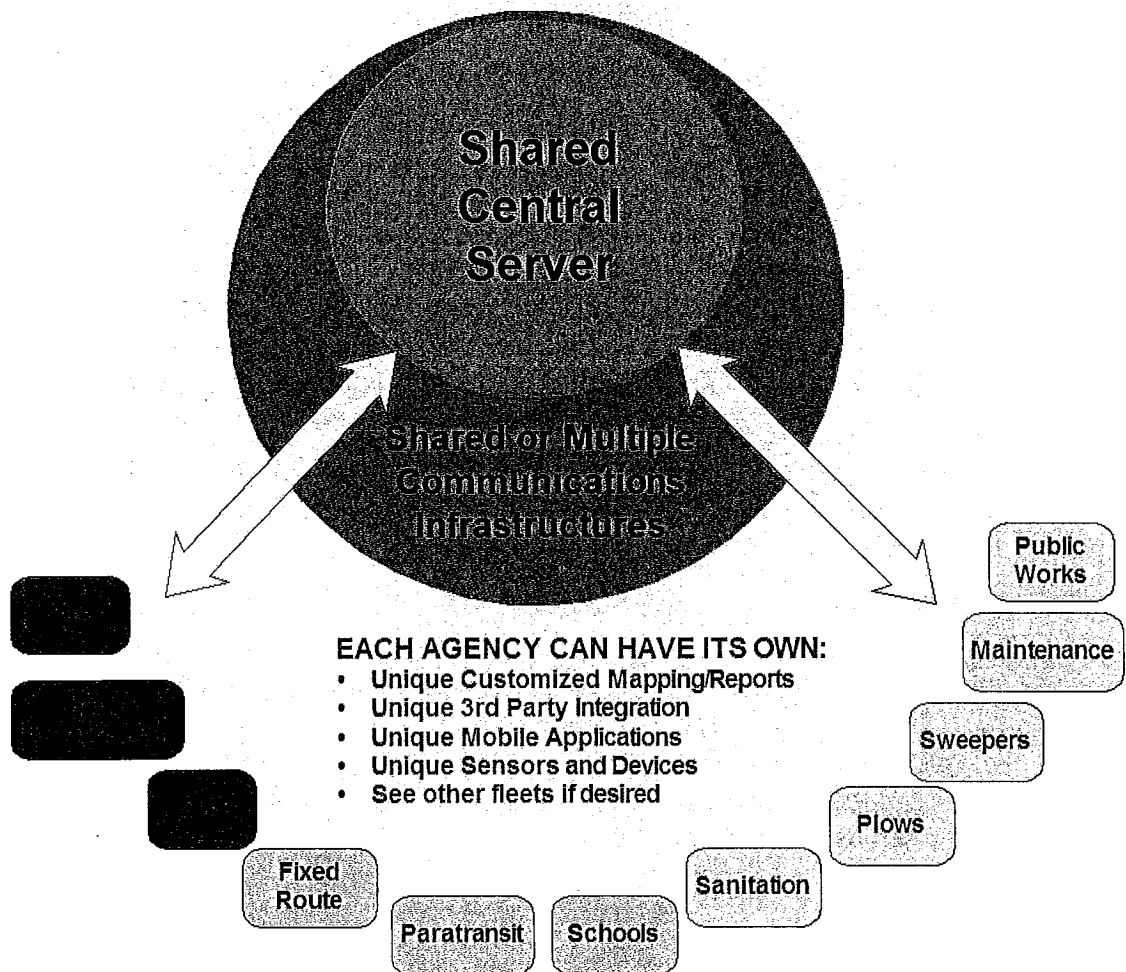


### Enterprise Shared Multi-Agency Systems

RSI has extensive experience implementing large enterprise systems that can be shared by several agencies within one organization, city, county, etc. The RSI system can be configured so that specific users only view their own vehicle fleet group, but the system will share the same backbone, servers, communications, etc.

For instance a city may only have to invest in one system yet their fire, transit, and public works departments can all use and share that same system.

RSI has implemented these shared enterprise systems for a variety of cities and counties throughout the country including many of the largest metro governments in the country.





## **Company Profile**

### **Company Overview:**

Radio Satellite Integrators, Inc. (RSI) designs, manufactures and implements integrated vehicle tracking and mobile data systems utilizing the Global Positioning System (GPS) and wireless communications. Based in Torrance, California, the company was founded with the mission of providing high-performance, low-cost systems for tracking mobile assets with GPS. RSI has focused its research, product engineering, and design efforts on the development of systems that are reliable, easy to use, and fully customizable.

### **Company History:**

RSI was founded in 1990 to address the emerging needs of integrating GPS technology with wireless communication systems and Geographic Information System (GIS) digital mapping technology. The company has more than 250 tracking systems and thousands of mobile units in place worldwide.

### **Company Products:**

RSI is continually developing, upgrading, and customizing its core product: The RSI AVL System featuring the RSI Mobile unit. RSI currently ships several different models of mobile units which represents the most advanced vehicle tracking technology on the market for fleet management and AVL systems. Designed to keep one step ahead of the ever-evolving world of wireless communications, RSI has the capability to use multiple communications systems for vehicle data reporting. An upgrade path is also provided to new or additional communications methods as they are developed. The RSI unit can utilize virtually any communications link including: cellular, GSM/GPRS, CDMA, two-way radio, and satellite solutions.

RSI Mapping applications offer a choice of true client/server or browser based Web applications. RSI has extensive expertise customizing ESRI GIS mapping products as well third party application integration.

### **Company Background:**

RSI is privately held with senior management and outside investors as the primary shareholders. It has maximized its capabilities by building key strategic relationships with other vendors to allow for an end product that is truly the result of the combined efforts of hundreds of individuals. Products are developed and designed by RSI and its partners and manufactured in state of the art facilities for guaranteed low cost and reliability. Installation and implementation is typically overseen by RSI staff at a client's site.



## Experience



**Miami-Dade County:** Miami-Dade County has the largest population in Florida and the 8<sup>th</sup> largest in the United States. RSI is implementing a large countywide AVL system for several departments and agencies including Public Works, Building Inspectors, Neighborhood Compliance, Solid Waste, Fire, Consumer Services, Water, and Community Action. Using RSI's new ESRI ArcGIS Server based Web browser interface, county departments are able to better manage their mobile assets and provide improved customer service. With over 1000 vehicles installed, the system is constantly growing department by department.



**City of Phoenix:** RSI has installed a customized AVL and Mobile Data system to the City of Phoenix Department of Public Works. The system is equipped on the City's solid waste fleet and public works fleet of approximately 400 vehicles. Each vehicle is equipped with an RSI mobile unit as well as a customized Garmin unit that will be used for messaging as well as individual route navigation for the drivers. The system allows fleet administrators to monitor the vehicles in real time as well as view reports on vehicle activity such as speed and location of armature lifts. The messaging terminals give the drivers the ability to instantly mark/record locations where there is a damaged or missing container.



**City of Houston:** The City of Houston, Texas is the fourth largest city in the United States centered in a metro area of nearly 6 million residents. RSI currently has a city-wide contract for multiple departments including Solid Waste, Fire, Public Works, Parks & Recreation, and others. The Web browser based AVL system is accessible by the individual departments and used in their own unique ways. Some of the various departments even have different reports, mobile hardware, and system configuration customized for their own unique needs.



**City of Oklahoma City:** The City of Oklahoma City has implemented an RSI AVL system over several departments including Water, Solid Waste, and Street Maintenance. Encompassing a wide variety of vehicles, the RSI AVL system provides different reports for different groups and vehicles. Some departments are using the RSI customized Garmin messaging terminal to provide instant communication between driver and dispatcher. In addition the RSI AVL system is tracking various sensor and events on certain vehicles such as lights, signs, and PTO activation.



**City of Jacksonville:** RSI has implemented a city-wide Automatic Vehicle Location system for the City of Jacksonville. The multi-agency system spans across several departments and various types of vehicle fleets including public works and various city agencies. Each department will have their own AVL interface to the system but will share some of the more expensive and transparent aspects of the system such as the communications backbone and centralized servers. The system is currently being expanded to additional city departments and agencies.



**City of Fresno:** RSI has implemented a full scale multi-agency AVL system for the City of Fresno. With a fast growing population around 1 million people in the greater metro area, the city looked to RSI to provide a customized AVL system for the Water, Sewer, and Planning agencies within the City. Spanning over 300 vehicles and dozens of computer workstations, the system is integrated with the City's extensive ESRI GIS mapping programs. The system has several key features including sensors on the sanitation vehicle loading arms.



**Boston Water and Sewer Commission:** RSI has implemented a turn-key Automatic Vehicle Location system for Boston Water and Sewer Commission. The (BWSC) currently operates water and sewer services for the City of Boston. RSI is implementing full end-to-end AVL system utilizing 2-way radio for wireless communications. With over 200 vehicles in the service fleet, the RSI AVL system uses a combination of ArcView and ArcGIS 9 for vehicle tracking using BWSC base maps.



**City of Visalia – Department of Public Works:** Located in California's San Joaquin Valley, the City of Visalia is a central hub for the state's thriving agricultural industry and home to more than 123,000 people. As one of the fastest growing cities in the country, Visalia needed help managing its fleet of public works and solid waste vehicles. Using a combination of RSI AVL and ESRI ArcGIS, the city can monitor and manage vehicle fleet activity to improve operational efficiency as well as customer service.



**Dallas Area Rapid Transit (DART):** Dallas Area Rapid Transit (DART) serves Dallas and 12 surrounding cities with public transportation including rail and bus services. The DART network of services moves more than 200,000 passengers per day across the 700-square-mile service area. Each of the 800 DART buses is installed with the RSI V-Track™ unit. Each V-Track™ unit is interfaced with a GFI GenFare fare box and also prompts the on-board headsigns and annunciators.



**Erie County Water Authority:** The Erie County Water Authority (ECWA) is responsible for the upkeep and supply of water to 640,000 residents in the greater Buffalo, NY area. Using the RSI AVL system and Kenwood two-way radios, the ECWA is able to track and monitor its fleet for a variety of dispatching, supervisory, and security uses. Viewed on RSI's powerful mapping software, ECWA administration can see detailed real-time and archived location data for the fleet of technician, supervisor, meter reader, emergency, and other operations vehicles.



**Consolidated Utility District:** The Consolidated Utility District of Rutherford County supplies water to over 30,000 residents of Rutherford County, Tennessee—one of the fastest growing counties in the nation. Radio Satellite Integrators installed a turn-key AVL system for their vehicle fleet using a stand-alone 2-way radio system. The Steuben County AVL system uses the ESRI ArcGIS mapping software as the underlying engine to the RSI AVL customized application.



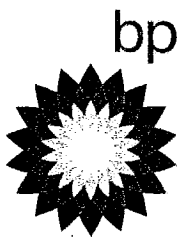
**Town of Mansfield Public Works:** The Town of Mansfield, Connecticut is located in the northeast corner of the state of Connecticut. With a population of 21,000 covering 45 square miles, public works are just as important to this small town as they are to any city, especially with their harsh winters. Mansfield has the RSI AVL system in their multi-use public works vehicles for snow plowing, spreading, salting, sanding, and various public works duties. The system uses a public data network for wireless communications.



**Richland County, SC:** Richland County is home to the state capitol of Columbia and is the second most populous county in South Carolina with approximately 340,000 people. The RSI AVL System will provide county-wide GPS tracking of their vehicles, concentrating on their public works fleets. The RSI AVL system combines GPS, two-way radio, and customized mapping software to provide real-time vehicle fleet location data to dispatchers and administrators. The AVL project was spearheaded by the County's GIS (Geographic Information Systems) department, who selected RSI based on several factors including RSI's expertise in using ESRI ArcGIS 9 software.



**State of South Carolina- Department of Education:** RSI is currently installing a state-wide AVL system for the State of South Carolina DOE that will encompass 6000 school buses across the state. The State owns all 6000 school buses and is going to use the RSI AVL system to insure the districts are operating and reporting on the buses in a satisfactory manner. Some of the several dozen school districts will have the option to use the AVL system for their own operations if desired. The RSI system will track virtually every device and sensor imaginable on each bus including doors, lights, arms, emergency exits, etc.

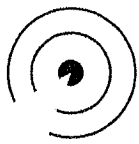


**bp British Petroleum (BP America Production Company):** RSI has implemented the first phase of a highly customized AVL system for a set of BP's vehicles that maintain wellheads in various remote areas of the southwest United States. Often times off paved roads or out of cellular coverage, the RSI AVL system uses a highly rugged hybrid mobile unit that can switch between cellular and satellite communications networks. These irregular conditions made it imperative that the system utilize BP's actual ESRI GIS map data as well guaranteed wireless communications. The system also incorporates multiple emergency panic buttons including a wireless handheld panic button that can be relayed via satellite when necessary.



**St. Lucie County Fire Rescue:** Radio Satellite Integrators has been selected by the St. Lucie County Fire Rescue to implement a fully integrated Automatic Vehicle Location (AVL) and mobile data system. The turn-key system will include 43 of the District's fire rescue vehicles and operate over a standard 2-way radio system that covers the entire county. The system will also include fully ruggedized Mobile Data Computers running RSI's SPOT (Site Preplan On-board Technology) mobile fire response software. The AVL system will be integrated with the existing CAD system from HTE Inc.





**Hawaii County Mass Transit:** Based in Hilo on the Big Island of Hawaii, The Hele-On buses run by Hawaii County Mass Transit provides public transportation all around the island servicing approximately 400,000 passengers per year. RSI has provided Hawaii County Mass Transit an AVL and Mobile Data Terminal System allowing administrators to track as well as communicate with the buses in real time using a Web based interface. RSI's newly updated Web based AVL interface uses ESRI ArcGIS Server as the underlying mapping engine for the AVL map interface.



**District of Columbia Public Schools:** As the local school district for our nation's capitol in Washington D.C., DCPS faces unique challenges in transporting its students throughout the year. In order to optimize the operation of nearly 800 school buses over this sprawling urban city, DCPS enlisted the help of vehicle tracking and routing technologies from Radio Satellite Integrators and the Trapeze Group. RSI and Trapeze were brought in to immediately take over and replace a competitor's routing and AVL solution that was not meeting the District's needs. The new integrated solution now provides valuable operational data such as planned versus actual route performance as well as door and light/arm activity on the buses.



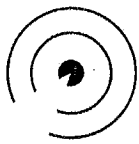
**City of Tampa Fire Rescue:** RSI implemented a complete AVL and Mobile Data system for the City of Tampa, Florida. The system operates over existing Tampa frequencies and towers, and is fully integrated to the Astra CAD system running on an IBM AS/400 system. RSI was able to implement its SmartSlot technology utilizing GPS time synchronization which allows for vehicle updates as fast as 5 per second using the City's existing Ericsson voice radios and allocated voice frequencies. Another critical project component was interfacing to the City's Computer Aided Dispatch (CAD) system from Astra software of North Carolina.



**Horry County, SC:** Horry County is located on the eastern most tip of the South Carolina coast and is home to the popular tourist destination city of Myrtle Beach. The Horry County government is currently implementing a multi-department AVL system for various fleets and agencies within the County. After witnessing the overwhelming success of the RSI AVL system in nearby Richland County, Horry County procured a system of their own.



**CEMIG:** Supplying energy to 17 million people, CEMIG is Brazil's largest electric utility company and one of the largest in all of Latin America. CEMIG covers the State of Minas Gerais expanding 560,000 square kilometers, which is equivalent in size to the entire country of France. To efficiently manage a utility workforce that can service this entire state requires a complex yet cost-effective logistical solution. In order to take on this gargantuan task, CEMIG contracted Radio Satellite Integrators to implement an AVL and mobile data system utilizing their existing E.F. Johnson MultiNet Trunking radio system. The initial phase of the project encompasses 400 of CEMIG's 2000 vehicles.



**Duval County Public Schools:** Duval County Public Schools is the 15<sup>th</sup> largest school district in the country with an enrollment of more than 155,000 students. Mainly consisting of the City of Jacksonville, DCPS contracted STA Inc. to handle its student transportation services. STA uses a combination of Trapeze software and RSI's AVL solution to track nearly 300 district school buses. Using the AVL system provided by RSI and Trapeze Software, the integrated solution provides valuable data to transportation operations such as doors sensors and also allows them to compare planned versus actual route performance.



**Chugach Electric Association:** Based in Anchorage, Alaska, the Chugach Electric Association provides power and electrical services to over 81,000 retail customers in the state of Alaska. The Chugach Electric Association ranks among the largest of the more than 900 electric cooperatives in the country. Utilizing RSI's AVL system, Chugach Electric is able to monitor their vehicle fleet in relation their own ESRI GIS data and infrastructure.



**City of Torrance Fire Department:** RSI has implemented a custom GPS-based Vehicle Tracking System for the Torrance FD using existing VHF frequencies. The system is integrated with the City's Tritech CAD system and includes RSI's SPOT (Site Preplan On-Board Technology) software for Pre-Incident Planning and In-Vehicle Navigation running on ruggedized mobile computers in the vehicles. Torrance FD has seen a significant decrease in on-site response times since the implementation of the AVL system.



**South Coast Air Quality Management District (AQMD):** The South Coast Air Quality Management District (AQMD) serves as the air quality regulation and enforcement agency for an area of 12,000 square miles covering four counties in southern California. RSI has implemented two separate GPS systems for AQMD, first in the late 1990's and more recently in 2008. RSI initially tracked AQMD inspector vehicles and now has implemented a customized AVL system to monitor hundreds of heavy duty vehicles for Carl Moyer funding compliance reports. These reports show the AQMD the exact engine hours and mileage of these vehicles (and thereby emission/pollution levels) within the South Coast basin.



**Radio  
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## References

### **Miami-Dade County**

Miami, FL  
Phone: 305-514-6691  
Contact: Daniel Diaz  
Division Director Fleet Mgmt.  
[ddiaz@miamidade.gov](mailto:ddiaz@miamidade.gov)

### **City of Oklahoma City**

Oklahoma City, OK  
Phone: 405-297-2237  
Contact: Bobbie Borchardt  
[bobbie.borchardt@okc.gov](mailto:bobbie.borchardt@okc.gov)

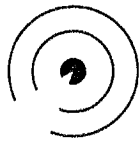
### **City of Phoenix**

#### **Department of Public Works**

Phoenix, AZ  
Phone: (602) 534-2524  
Contact: Larry Lasco  
[larry.lasco@phoenix.gov](mailto:larry.lasco@phoenix.gov)

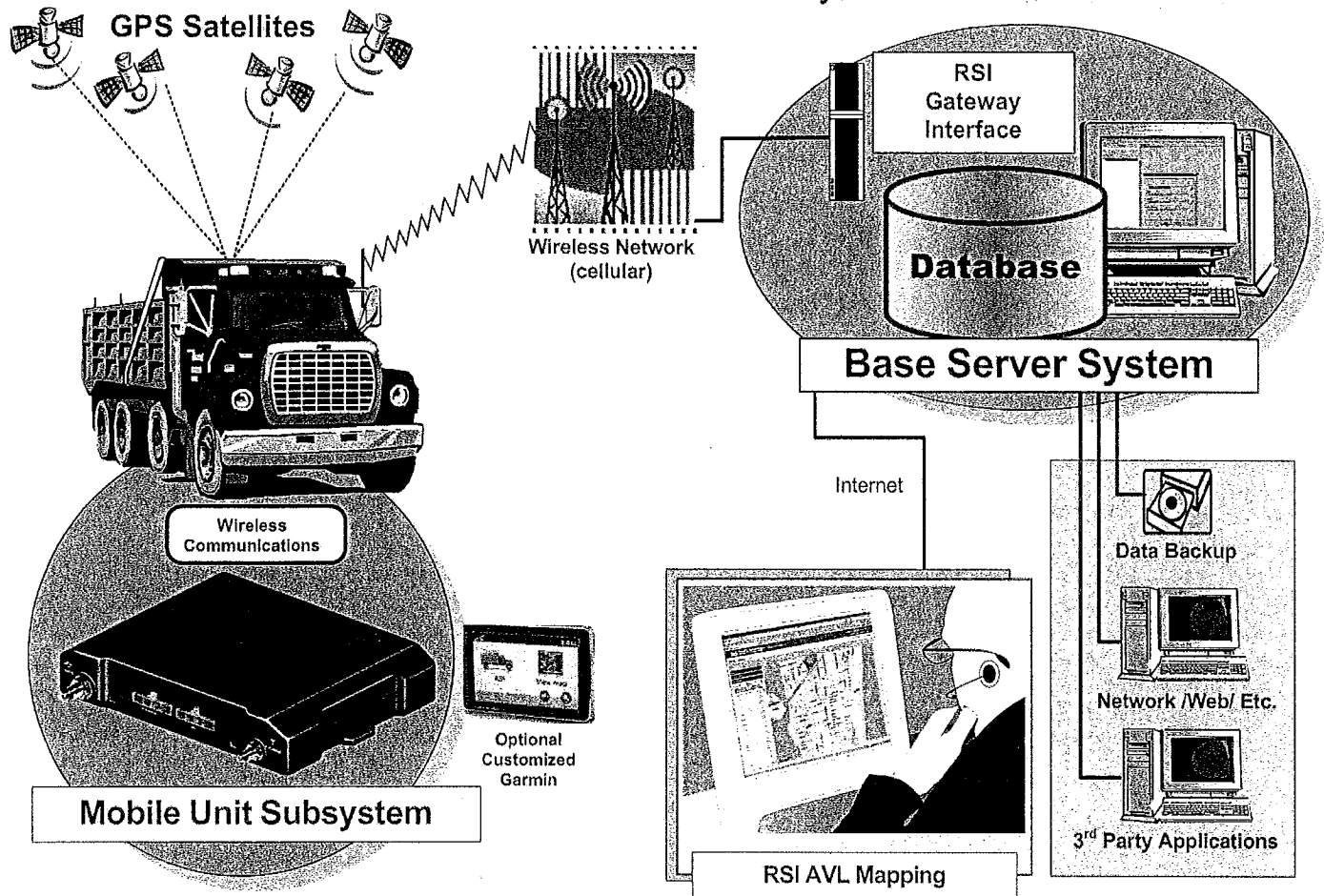
### **Boston Water & Sewer Commission**

Boston, MA  
Phone: 617-989-7522  
Contact: Ronald Sitcawich  
[SitcawichRJ@BWSC.ORG](mailto:SitcawichRJ@BWSC.ORG)



## Technical Overview

### AVL System Overview



### Radio Satellite Integrator's AVL System

An RSI AVL solution consists of in-vehicle equipment and base applications and equipment. The **In-Vehicle Equipment is centered on the RSI Mobile Unit**, a self-contained "black box" device integrating GPS location and sensor technologies, as well as wireless communications. The mobile device can be connected to any device or sensor including lights, ignition, doors open/closed, alarms, etc. In addition, any variety of in-vehicle computing devices such as laptops or MDT's can be connected to the unit and mounted for a driver interface to the system.

The Mobile unit is responsible for the reporting of vehicle location and status information in addition to acting, if desired in the future, as a transparent communications gateway between the Base and Mobile Data or other onboard devices such as alarms, etc.



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The **Base Application** will be a configurable Web-browser based application based on ESRI ArcGIS Server hosted offsite by RSI. Users interact with the system through industry-standard mapping tools as well as customized reporting applications. The RSI AVL program will use the client's existing ESRI GIS map data if it's available.

The Base Server manages all fleet communications and configuration, acts as a messaging and data transfer gateway between base-side applications and in-vehicle devices, and archives and distributes the vehicle location and status information to the mapping application over the Internet. The Base Server will be hosted by RSI in our state-of-the-art server hosting facilities.



## Wireless Communications Options

RSI has worked with more communications technologies in our 20 years of technology leadership than any other vendor in this marketplace.

There are several options for wireless communications and RSI is proficient with all of them.

<b>Public Data Network (Cellular)</b>	<ul style="list-style-type: none"><li>• GPRS/GSM/EDGE (AT&amp;T, T-Mobile, Rogers, etc.)</li><li>• CDMA/EV-DO/1xRTT (Verizon, Alltel, etc.)</li><li>• Others: Sprint/Nextel/iDEN/</li><li>• High Speed Broadband Networks (3G/4G)</li></ul>
<b>Other Options</b> (hybrid communications)	<ul style="list-style-type: none"><li>• WiFi (802.11)</li><li>• Satellite (Iridium, Inmarsat, etc.)</li><li>• Two-way radio (AVL data dedicated systems)</li></ul>

- RSI can use virtually any wireless carrier for the communications portion of this system.
- As required and specified in the RFP, we will be proposing a system configured for the Sprint wireless network.
- Please note that devices using the AT&T network are significantly less expensive, so we are proposing these as an option.
- The RSI AVL system can support mobile units using multiple different carriers and technologies.

### Hybrid Communications Option

RSI specializes in engineering customized AVL systems that can use a combination of wireless communications technologies. Our mobile units can support any combination of: cellular, satellite, two-way radio, WiFi, as several others. RSI has unparalleled experience in the design and implementation of these complicated customized hybrid systems.



## Public Data Network Options

The recommended and most cost efficient means to send wireless data is through a cellular or public data network. Public data networks are wireless data networks that are provided by all the major cellular phone companies. The wireless data networks generally have the same coverage areas as their voice and mobile phone coverage areas.

### Wireless Carriers

RSI has partnerships and capabilities with every major wireless carrier. Choosing a carrier depends on several factors including availability in your area, quality of coverage, rate plans, and existing contracts/discounts. **Some technologies have higher equipment costs but lower data plans, and vice versa. Specifically, those carriers using CDMA (Sprint/Verizon) have significantly more expensive mobile hardware costs. Mobile devices using GPRS (AT&T) are much less expensive.**

### Update Rate

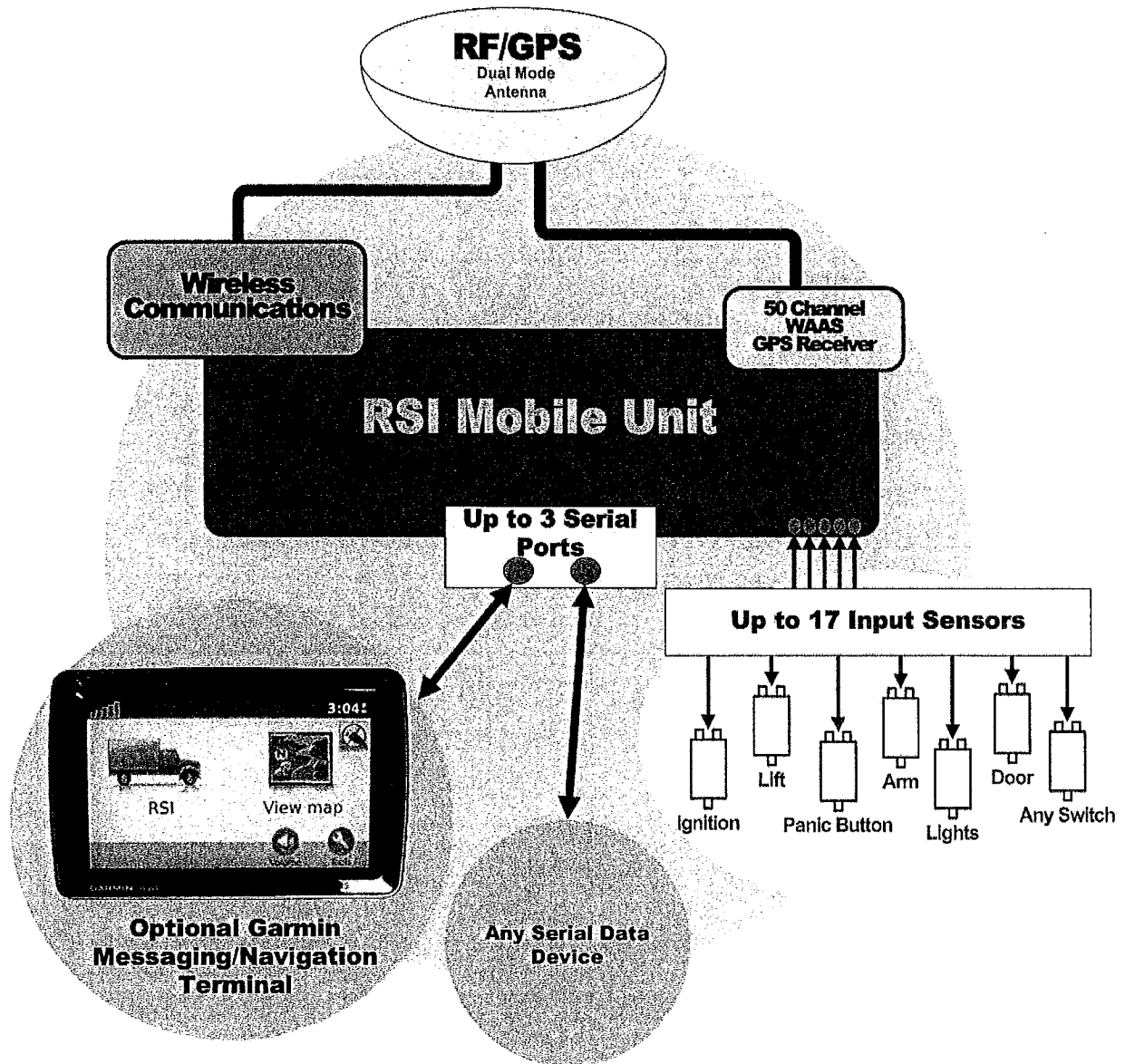
The update rate you need will depend on how frequently you want your location and other data from the vehicles. Update rates can adjust dynamically depending on factors such as vehicle status or the triggering of an on-board sensor.

RSI will work with you to help determine a wireless technology, carrier, and update rate for you as we have extensive experience implementing AVL systems with fleets just like yours.

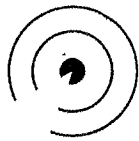
Typically we recommend configuring the units to send data every 30-60 seconds PLUS ignition on/off, starts, stops, turns, and sensor events.



## RSI Mobile Unit







**Radio  
Satellite  
Integrators, Inc.**

**City of San Diego**  
**RFP# 10022954-12-Z**  
**GPS System**  
January 18, 2011



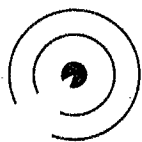
### **RSI Mobile Unit**

The recommended RSI Mobile Subsystem consists of a RSI Mobile Unit; GPS and RF antennas and associated cabling; all required data, sensor, and power connections.

Each RSI Mobile Unit contains a 50 channel GPS receiver (or greater), wireless communications, and multiple external data and sensor ports. To ensure reliability and availability of the entire system, the critical mobile units are built to exacting military standards to resist vibration, climate, and electromagnetic interference. First-quality components, extensive RF/EMI shielding, and specialty power conditioning circuits protect the GPS receiver and micro-controller in the "computer hostile" vehicular environment.

Each RSI Mobile Unit will be equipped with a state-of-the-art 50 channel, WAAS enabled, all-in-view GPS receiver. This GPS receiver delivers superior performance and field-proven reliability and provides for fast signal reacquisition, position accuracy, and the filtering of spurious and erroneous data. The GPS accuracy is 2 meters (7 feet).

RSI is offering two types of mobile units with similar functionality that support different amounts of inputs/outputs: up to 5 (standard) and up to 17 (optional).



### **Interface to Devices and Sensors**

The RSI Mobile Unit is capable of interfacing to a wide variety of external mobile data terminals, mobile computing devices, in-vehicle peripherals, and various sensor systems. The RSI Mobile Unit serves as a mobile gateway, paying particular attention to supporting a variety of devices. The RSI Mobile Unit will be connected to the on-board vehicle power and any sensor signals as desired such as:

- Ignition on/off
- Door open/locked
- Lights on/off
- Any device/event/switch/data source
  - Armature/device up/down
  - RF ID or Card Swipe Reader
  - Vehicle Engine Diagnostics
  - Brooms/Plows/Spreaders
  - Landmarking
  - Siren/Light Bar/Flashers
  - PTO
  - Etc.

### **Vehicle Diagnostics Option**

As an option, an interface to engine diagnostics can be added to the RSI AVL system giving you real-time access to engine trouble codes and other vehicle information for either light duty or heavy duty vehicle types.

### **Panic Button Feature**

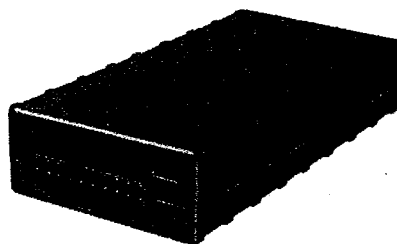
The RSI Mobile Unit can be equipped with an emergency panic button configuration that is a dashboard-mounted button that sends a priority signal over-the-air to the dispatch interface or real-time alert. RSI can also offer a wireless handheld panic button that can be activated up to 300 feet from the vehicle.

### **Antennas, Cables, and Connectors**

The GPS/RF antenna is typically an active low-profile micro-strip, two-in-one “hockey-puck” type and is connected to the RSI Mobile Unit with low-loss coaxial cable. The high gain antenna increases the ability for the GPS to receive weak signals under trees or canopy, while its very small design presents little or no profile for tampering or inadvertent damage. The RSI Mobile Unit can use any type of GPS antenna that is required or specified. The RSI Mobile Unit comes with all bracketing, cabling, and connectors required for full installation. RSI configures the system so it cannot be easily disabled by the driver and/or user.



## RSI Mobile Unit (5 I/O)



- GSM/GPRS or CDMA 1xRTT radio configurations
- Internal or External Cellular and GPS antenna options for easy installation
- High Sensitivity GPS
- 3-Axis Precision Accelerometer
- 20,000 Buffered Message Log
- 32 Geo-fence capability
- 5 Inputs/3 Outputs/1-wire® Interface for Driver ID, Temperature Sensors, and more.
- Dual serial ports
- Garmin® FMI support
- Power management sleep modes
- Automatic, over-the-air configuration, firmware download, and device management

### Communication Specifications

GSM/GPRS Quad-Band	850/900/1800/1900 MHz
GSM/GPRS Output Power	850: 2 Watts (Class 4)
	900: 2 Watts (Class 4)
	1800: 1 Watt (Class 1)
	1900: 1 Watt (Class 1)
CDMA Dual-Band	800/1900 MHz
CDMA Output Power	800: +24 dBm
	1900: +24 dBm
Data Support	SMS, GPRS or CDMA 1xRTT packet data

### Certifications

Fully certified FCC, CE, IC, PTCRB, Cellular Carriers

### Location Specifications

Location Technology	50 Channel GPS
	SBAS: WAAS, EGNOS, MSAS
Location Accuracy	2.0 meter CEP (with SBAS)
Tracking Sensitivity	-162 dBm
Acquisition Sensitivity	-147 dBm
AGPS capable	

### Comprehensive I/O

Inputs	5 (2 fixed bias low, 3 fixed bias high)
Outputs	3 Relay Driver (150 mA)
Serial Interfaces	2 (1 TTL serial, 1 switched power TTL)
A/D Inputs	2 (1 internal, 1 external)
1-Wire® Interface	Driver ID
	Temperature Sense
Status LEDs	GPS and Cellular

### Connectors, SIM Access

I/O, Power, Programming	20-pin Molex-type fused power harness
GPS Antenna	External SMA (w/ tamper monitoring, 3V) or Internal
Cellular Antenna	External SMC or Internal
SIM Access	Internal (GSM/GPRS variant only)

### Electrical Specifications

Operating Voltage	6-32 VDC
Power Consumption	<3 mA @ 12 V (Deep Sleep)
	<10 mA @ 12 V (Sleep on Network with SMS)
	<20 mA @ 12 V (Sleep on Network with GPRS)
	<70 mA @ 12 V (Active Tracking)

### Physical Specifications

Dimensions	2.0 x 4.0 x 0.85 inches (51 x 102 x 22 mm)
Weight	74 g (external), 85 g (internal)

### Environmental Specifications

Operating Temperature	-30° to +75° C
Storage Temperature	-40° to +85° C
Humidity	95% R.H. @ 70° C non-condensing
Shock and Vibration	U.S. Mil. Std. 202G and 810F, SAE J1455
EMC/EMI:	SAE J1113

### Mounting

Tie-wrap, Adhesive, or Velcro  
Screw Mounting Bracket

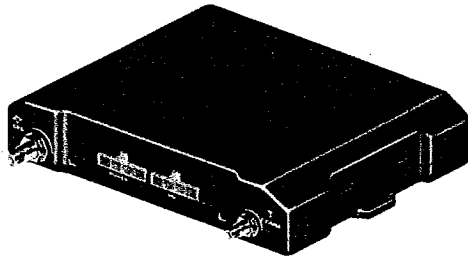
### Optional Features/Functions

- Driver ID with 1-Wire® protocol
- Temperature Sensing via 1-Wire® protocol
- Backup Battery
- External GPS and Cellular Antennas
- Internal GPS and Cellular Antennas
- NMEA data via serial
- External A/D input
- Serial Cables
- jPOD™ truck ECU interface
- Garmin® FMI compatible interface cable
- Piezo speaker, panic button, and privacy button
- Power harness with two (2) 3A Fuses

*Specifications Subject to Change.*



## RSI Mobile Unit (17 I/O)



- GSM/GPRS, CDMA 1X, or HSPA cellular configurations
- Dual reporting 20,000 buffered message log
- Built-in 3-axis accelerometer for motion sensing, hard braking, impact detection
- 32 built-in Geo-Zones, plus any combination of circle or polygon zones, up to 5400 points
- Web-Based Device Management diagnostic tools
- Garmin, MDT, and other advanced peripherals support

### Location Specifications

Location Technology	50 Channel GPS (with SBAS) SBAS: WAAS, EGNOS, MSAS, GAGAN
Location Accuracy	2.0 meter CEP (with SBAS)
Tracking Sensitivity	-160dBm
Acquisition Sensitivity	-147dBm
Kick Start	3 Sec @ -130dBm
AGPS capable	

### Communications Specifications

Data Support	SMS, GPRS (UDP), CDMA 1X packet data
Cellular/PCS:	FCC- Parts 22, 24; PTCRB
GPRS	Up to class 12
GPRS Quad-Band	850/900/1800/1900 MHz
CDMA Dual-Band	800/1900 MHz
HSPA/UMTS Tri-Band	850/1800/1900 MHz
	HSUPA 2.0 Mbps
	HSDPA 7.2 Mbps

### Comprehensive I/O

Ignition Input	1
Inputs	7 (high/low selectable 0-30 VDC)
Outputs	5 (open collector relay 150mA)
Current Limited Outputs	2 (20mA)
A/D Inputs	4 (0 - 30VDC, +/-0.1V accuracy)
1-Wire® Interface	Driver ID
	Temperature Sense
Status LEDs	GPS and Cellular

### Optional Features (with add-in daughter boards)

WiFi	802.11b/g/i
JPOD Truck ECU Interface	J1708, J1939

### Certifications

Fully certified FCC, CE, IC, PTCRB, CARRIERS

### Electrical Specifications

Operating Voltage	6 - 32V DC
Power consumption	< 4 mA @ 12VDC (Deep Sleep)
	< 10 mA @ 12VDC (Sleep on Network (SMS))
	< 20 mA @ 12VDC (Sleep on Network (GPRS))
	< 70 mA @ 12VDC (Active Tracking)

### Physical Specifications

Dimensions	4.3 (L) x 3.2 (W) x 0.86" (H), (110 x 81 x 22mm)
Weight	4 oz, (113 g)

### Environmental Specifications

Temperature	-30° C to 70° C (Operating), -40° C to 85° C (Storage)
Humidity	95% RH @ 50° C non-condensing
Shock and Vibration	U.S. Military Standard 202G and 810G, SAE J1455
EMC/EMI	SAE J1113

### Connectors, SIM Access

SIM Access	Internal
External Cellular	SMC
External GPS	SMA (with tamper monitoring, 3.0v)
WiFi option	RP-SMA
Vehicle Bus option	DB-15
4-Pin Molex	Power, Ground, Ignition, A/D
2 5-Pin Molex	Switched Power Serial
16-Pin Molex	Expansion port
22-Pin Molex	I/O connection

### Optional Features/Functions

- External antennas (GPS, cellular, combined GPS/cellular)
- Serial adapter cable RS-232 8-wire (PPP, AT Commands, NMEA GPS output)
- JPOD dongle for truck ECU interface
- Connectorized I/O wiring harnesses

*Specifications subject to change*



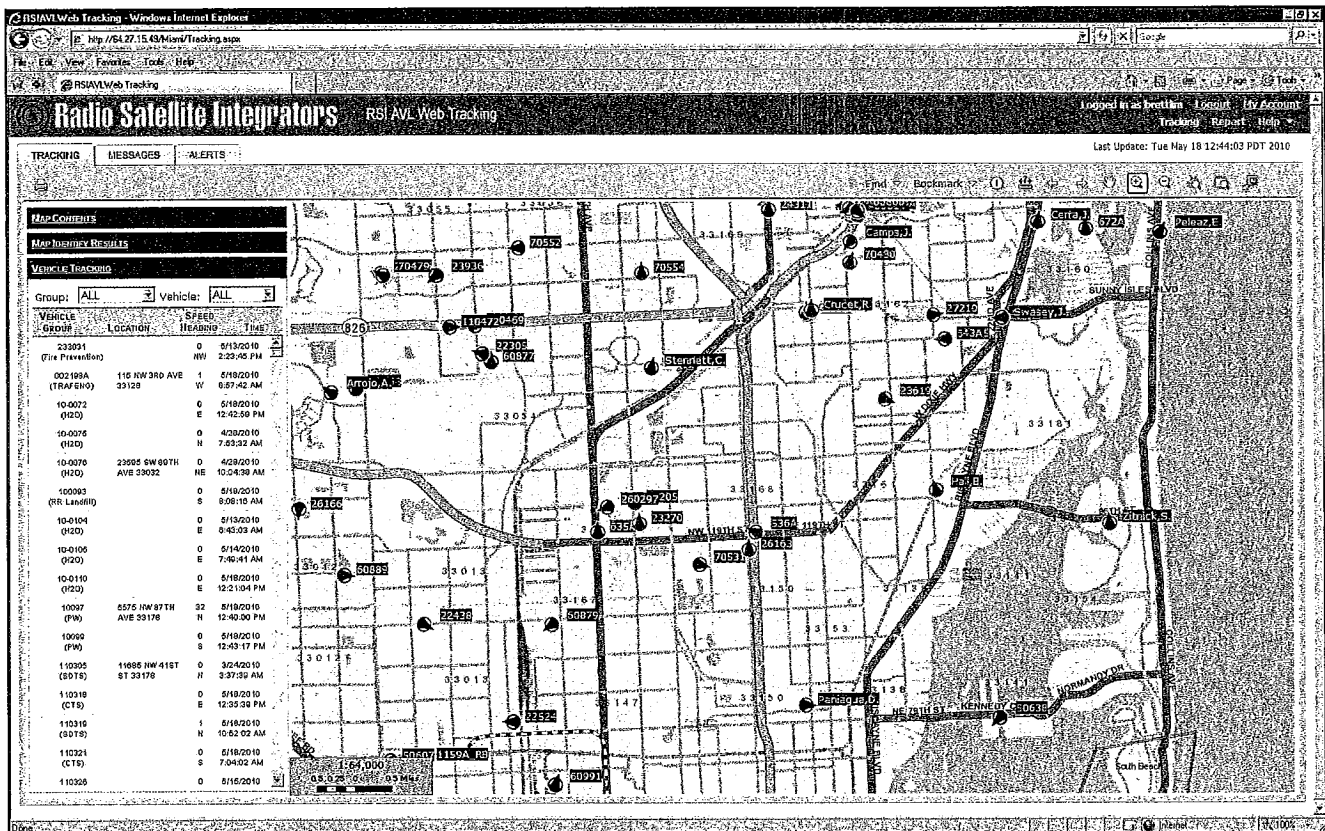
## Mapping and Display Application

Our powerful mapping and display application, RSI AVL, will provide operations personnel the capability to rapidly, geographically analyze the GPS information and make critical decisions. This application is based on an ESRI ArcGIS Server Geographic Information System (GIS), which displays data collected from the mobile units at the Base Server. They run the tools and controls that enable the operations personal to quickly adapt the information they are collecting and analyzing the views they are using to manage evolving situations.

The Mapping and Display Application provides valuable AVL Management tools:

- Real-Time Vehicle Tracking (map-based)
- Report Generation (tabular or map-based)

The assignment of user-permission levels allows access to appropriate sub-sets of the installed functionality.



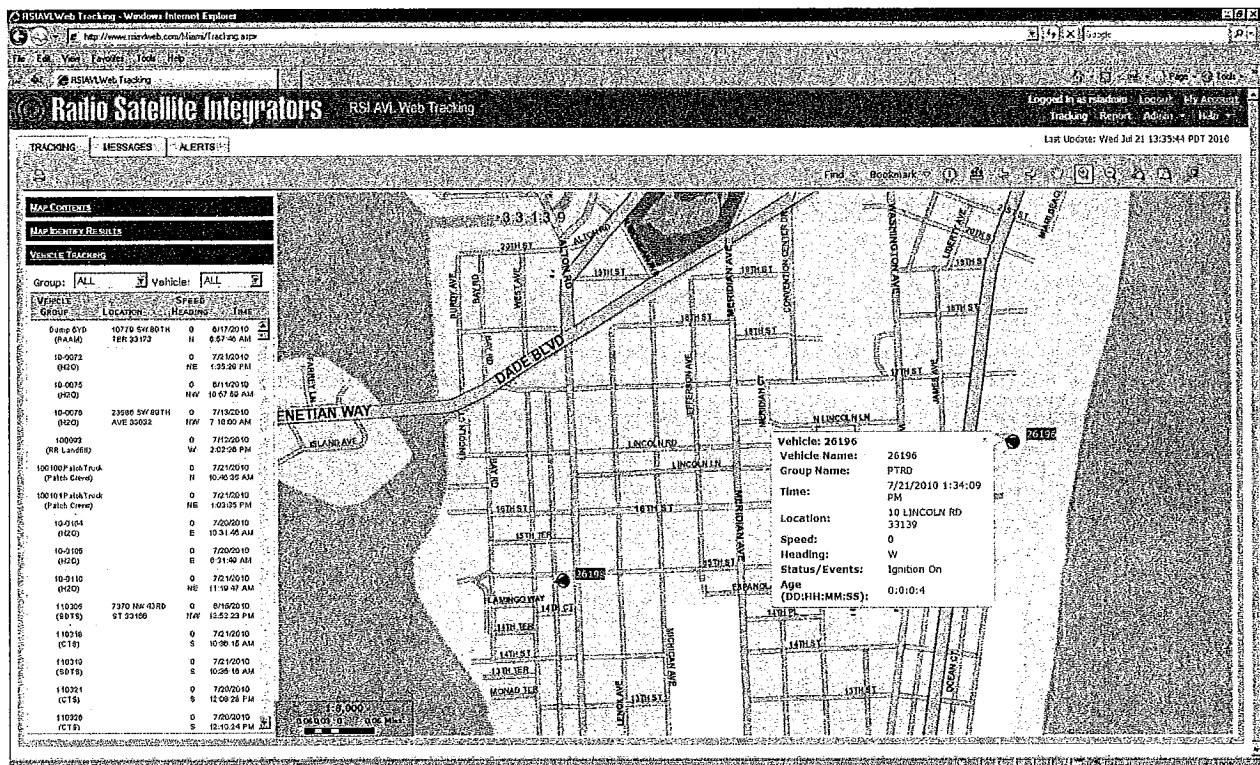
*Note: Your user interface will differ depending on customized configuration and preferences.*



## Real-Time Vehicle Tracking

The RSI AVL Application displays the current location and status of the vehicle fleet, along with address, route, and other attribute information, over both raster and vector-based maps (as desired). The use of a powerful ESRI ArcGIS Server engine along with the incorporation of vector map data allows for almost endless display and analysis possibilities. A wide variety of customizable functionality is available and is described below.

The vehicle icons may be configured to indicate (using colors, directional symbols, labels, and size) various vehicle attributes (such as ID, status, speed, heading, etc.). All of the vehicle attribute data may be instantly queried and displayed in a pop-up box using a standard identify tool. Further, alarm and event notification may be set to notify the user of a status change for a particular vehicle.

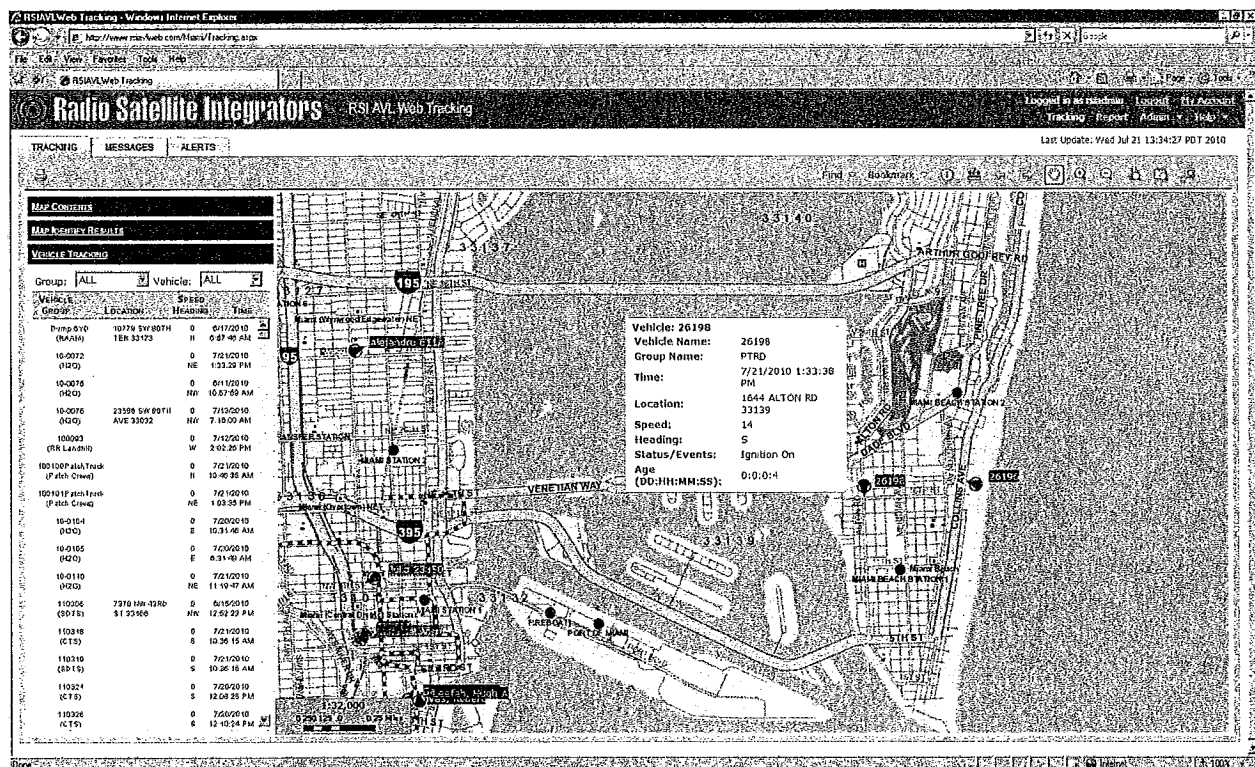


Clicking on a vehicle from the menu bar list will reveal more options for that specific vehicle.



The RSI AVL Application displays the vehicle data in a “map window.” The map window can be set to display a particular area, route, stop, or address, or to track a specific sub-set of the entire fleet (from the entire fleet to an individual vehicle). In RSI AVL the map display window possesses a full-set of map manipulation and query functionality. Map manipulation tools and buttons are available to zoom, pan, and center the display on a particular vehicle, route, stop, or address. Additional tools are available to enable or disable labeling, to customize the map display according to user preferences, and to enter points and attributes (for incidents, etc.). Map query options include the ability to locate an address, vehicle, or stop, along with the capability to identify the closest available vehicle(s) to any entered point, address, or incident.

The RSI AVL system allows the user to set geo-fences on the map display. This geofence will create an alert and/or exception report when breached and will appear as another item of status data with each vehicle position report. Geofences can be created as polygons or a configurable radius from a specific point, as well as created from existing boundaries, landmarks or zones within your GIS.





## Real-Time Alerts

The RSI AVL system allows authorized administrators extensive control over system features including alerts and alarms. The system can be configured to notify selected users when specific events occur with any of the vehicles. This includes geofences, hours of operation, idle, panic buttons, etc. Notifications can be sent as an e-mail, SMS, or to the alert screen on the software.

**Radio Satellite Integrators**

RSI AVL Web Tracking

RSI AVL ADMINISTRATION

**Manage Alerts**

**SELECT VEHICLES:**

**SELECT EVENTS FOR ALERTS:**

**SELECT USERS FOR EMAIL ALERTS:**

**Set Notification by Vehicle Group:**  
☒ ALL  
☐ Apply Updates to Subgroups  
☐ Remove Vehicle Override

**Set Notification by a Vehicle:**  
☒ ALL

Event Name	Tracking	Email
Accessory Off	<input type="checkbox"/>	<input type="checkbox"/>
Accessory On	<input type="checkbox"/>	<input type="checkbox"/>
Alarm On	<input type="checkbox"/>	<input type="checkbox"/>
Armature	<input type="checkbox"/>	<input type="checkbox"/>
Arrive Geofence	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Aux Motor Off	<input type="checkbox"/>	<input type="checkbox"/>
Aux Motor On	<input type="checkbox"/>	<input type="checkbox"/>
Brush Down	<input type="checkbox"/>	<input type="checkbox"/>
Brush Up	<input type="checkbox"/>	<input type="checkbox"/>
Check Engine Light On	<input type="checkbox"/>	<input type="checkbox"/>
Depart Geofence	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Door Closed	<input type="checkbox"/>	<input type="checkbox"/>
Door Open	<input type="checkbox"/>	<input type="checkbox"/>
Dump Off	<input type="checkbox"/>	<input type="checkbox"/>
Dump On	<input type="checkbox"/>	<input type="checkbox"/>
E-Door Closed	<input type="checkbox"/>	<input type="checkbox"/>
E-Door Open	<input type="checkbox"/>	<input type="checkbox"/>
Hazard Light On	<input type="checkbox"/>	<input type="checkbox"/>

**Filter User:** ALL

<input type="checkbox"/> cyrus.weatherall	<input type="checkbox"/> danny.mathes	<input type="checkbox"/> david.degeorge
<input type="checkbox"/> david.helson	<input type="checkbox"/> dawn.gaskin	<input type="checkbox"/> deborah.dimagli
<input type="checkbox"/> dejan.nedlin	<input type="checkbox"/> dennis.barton	<input type="checkbox"/> dennis.clowers
<input type="checkbox"/> dennis.Narney	<input type="checkbox"/> dennis.rhodes	<input type="checkbox"/> denny.frizzell
<input type="checkbox"/> derald.ross	<input type="checkbox"/> derrick.wooten	<input type="checkbox"/> don.gough
<input type="checkbox"/> doug.holmes	<input type="checkbox"/> doug.moore	<input type="checkbox"/> emmitt.greene
<input type="checkbox"/> enid.flores	<input type="checkbox"/> gene.king	<input type="checkbox"/> iris.newman
<input type="checkbox"/> james.hunter	<input type="checkbox"/> james.sauls	<input type="checkbox"/> jamey.harrison
<input type="checkbox"/> jc.reiss	<input type="checkbox"/> jeff.twiehaus	<input type="checkbox"/> jerry.stair
<input type="checkbox"/> jess.shumway	<input type="checkbox"/> jhorevtcz	<input type="checkbox"/> jhtest
<input type="checkbox"/> jim.crawford	<input type="checkbox"/> jim.linn	<input type="checkbox"/> jmichels
<input type="checkbox"/> joan.chism	<input type="checkbox"/> john.johnson	<input type="checkbox"/> joyce.plunkett
<input type="checkbox"/> kell.mcdowell	<input type="checkbox"/> kenneth.mitchell	<input type="checkbox"/> kenny.davis
<input type="checkbox"/> kerry.spencer	<input type="checkbox"/> laura.story	<input type="checkbox"/> lee.holland
<input type="checkbox"/> lee.moore	<input type="checkbox"/> marc.holland	<input type="checkbox"/> mary.gentry
<input type="checkbox"/> matt.salazar	<input type="checkbox"/> mholzworth	<input type="checkbox"/> micah.forgue

**Radio Satellite Integrators**

RSI AVL Web Tracking

TRACKINGMESSAGESALERTS

Filter by Group: ALL Vehicle: ALL

VEHICLE	ALERT TEXT	DATE
20333 0644030 (WasteWater)	Depart Geofence Line Maintenance	2/1/2011 5:17:16 PM
20332 0644030 (WasteWater)	Arrive Geofence Line Maintenance	2/1/2011 5:02:59 PM
20330 0244202 (WasteWater)	Arrive Geofence Line Maintenance	2/1/2011 1:23:46 PM
20331 0933275 (Water)	Arrive Geofence Line Maintenance	2/1/2011 1:23:23 PM
20329 0831445 (Bulky)	Depart Geofence Solid Waste Management	1/21/2011 6:50:30 AM





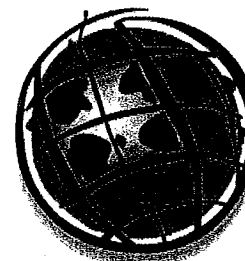
Radio  
Satellite  
Integrators, Inc.

City of San Diego  
RFP# 10022954-12-Z  
GPS System  
January 18, 2011



## ESRI

The RSI AVL Mapping application is based on mapping and GIS engines from ESRI, the largest GIS software vendor in the world, and a pioneer of the technology. Their systems are in use throughout the world by utilities, governments, and large companies, in thousands of applications, which rely on analysis of spatially referenced data. RSI AVL was the first system in the world to implement a real-time GPS interface into ArcView. The RSI AVL application is based on the actual ESRI ArcGIS Server software, but no licenses are needed by the customer.

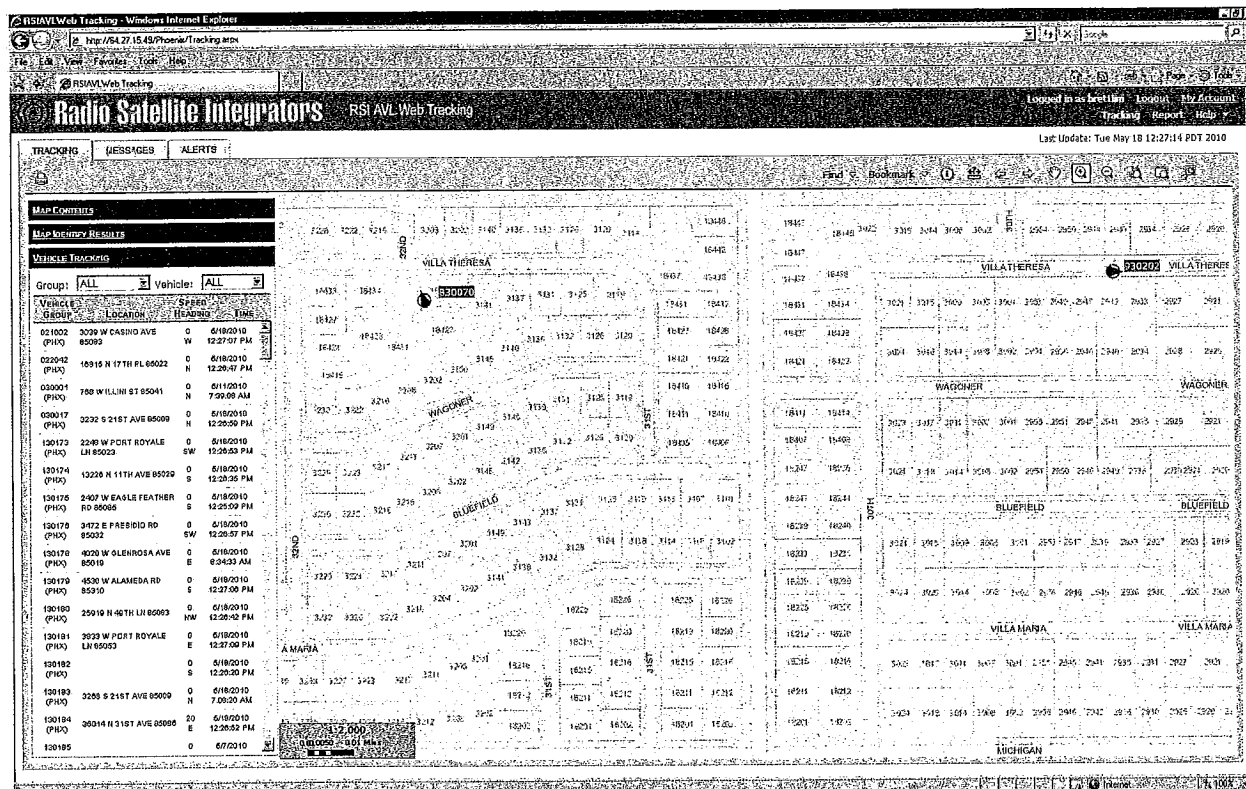


**ESRI**  
Technology

**AUTHORIZED  
BUSINESS PARTNER**

## Using YOUR Map Data

The RSI AVL system can use virtually any type of map data, but in particular our software can overlay our AVL information on your own ESRI GIS maps. RSI allows you to utilize your existing investment of time and labor that went into your ESRI map data. The RSI AVL system relates real-time vehicle location and status data to the infrastructure, assets, boundaries, updates, routes, parcels, landmarks, and other critical elements of your constantly changing GIS map data. RSI has extensive experience working with ESRI data and environments in all forms (.shp files, SDE, etc.). As an option, RSI can actually access your GIS map data in real time via Map Services.

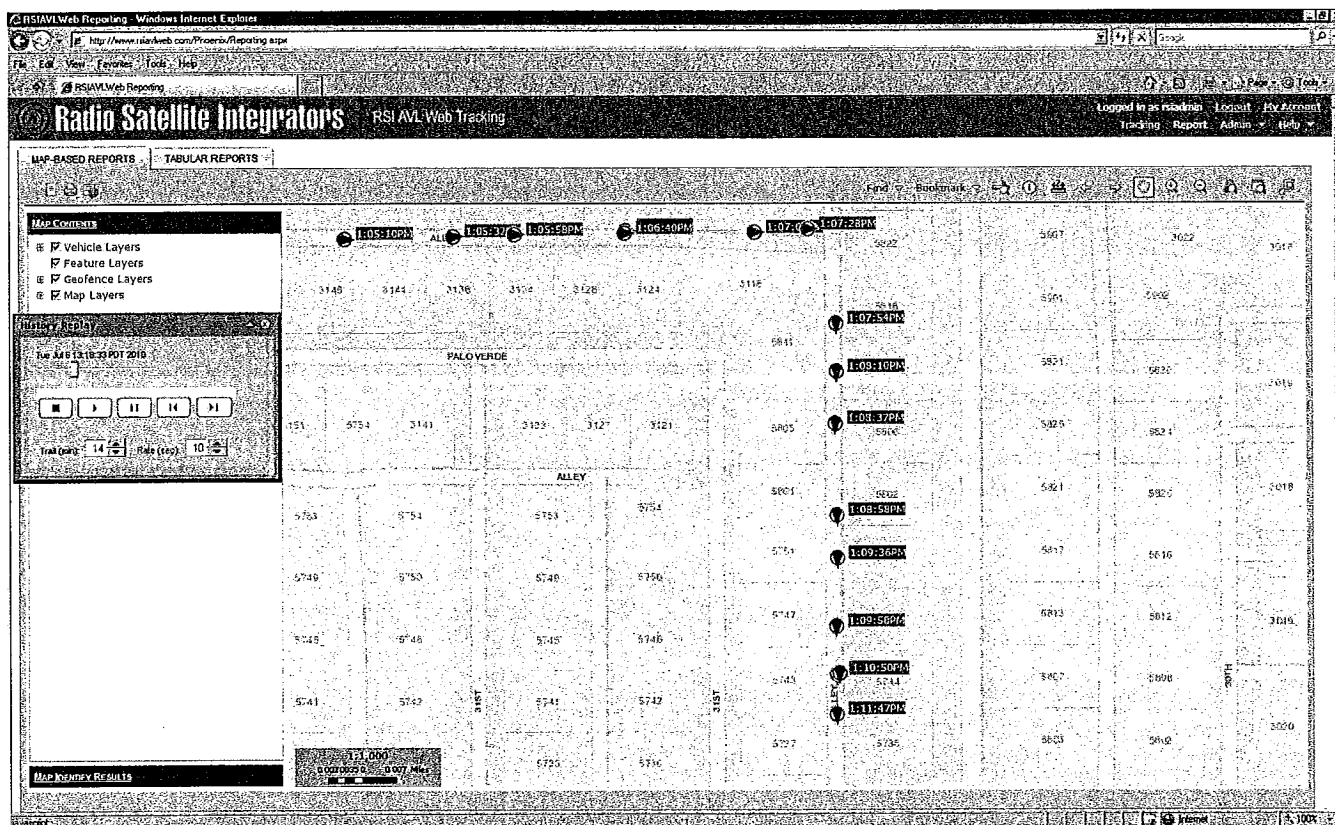




## Leveraging GIS Technology

Because Radio Satellite Integrators uses a powerful ESRI GIS as the basis for both display and analysis, operations has the capability to perform complex “spatial query” analysis that capitalizes on the geographic referencing or correlation of the GPS location and velocity data collected with the base map. Our use of vectorized maps allows the user to analyze space and time components in entirety. Query capabilities are virtually unlimited. For example, RSI AVL includes a unique algorithm developed by RSI, which selects and recommends a vehicle for dispatch based on real-time location.

All of the real-time tracking functionality is available through the menus, buttons, and tools of the graphical user interface (which is easily customized to accommodate specific desires and requirements).



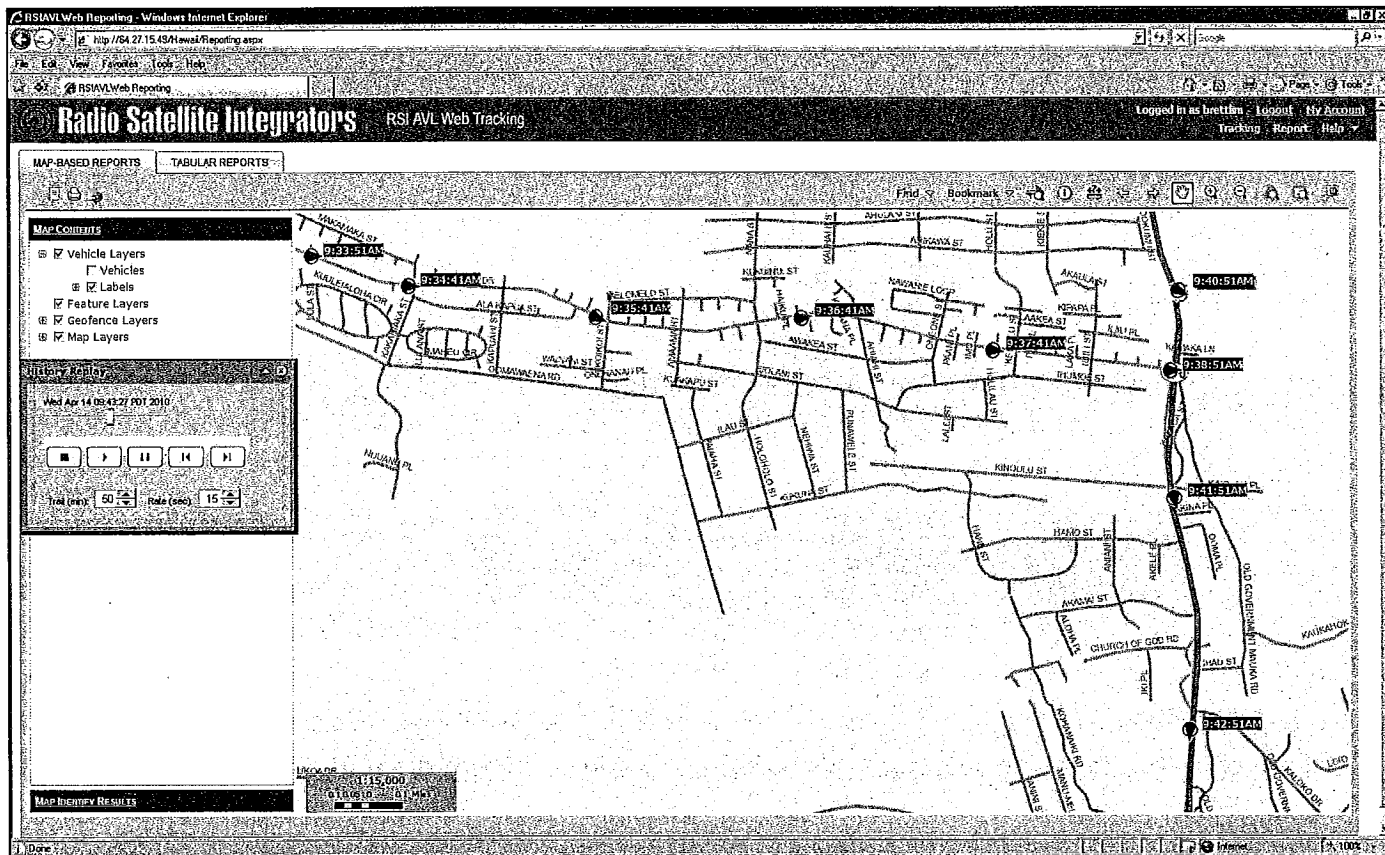


## Reporting Functions

The Report Generation Application is an extension to the Real-Time Vehicle Tracking Application described above, and can generate both tabular and graphical map-based reports based on archived vehicle location and status data. Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria. The **Map-based report** displays allow users to visually display or re-trace a vehicle's route and status, and include the same map manipulation and query functionality as the real-time vehicle tracking displays. **Tabular reports** display unit location and activity in a text-based spreadsheet or table. Such reports may be exported into virtually any format including .CSV and MS Excel files.

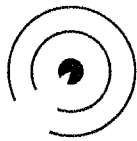
Specific types of reports will be customized to the customers' guidelines as part of initial system design review.

The screenshot shows the 'RSI AVL Web Tracking' application running in a Windows Internet Explorer browser. The page has a header with the 'Radio Satellite Integrators' logo and 'RSI AVL Web Tracking' text. Below the header, there are tabs for 'MAP-BASED REPORTS' and 'TABULAR REPORTS'. The 'TABULAR REPORTS' tab is active, showing a 'No report available' message. The main content area is divided into three sections: 'REPORT TYPE', 'GROUPS & VEHICLES', and 'TIMEFRAME'. The 'REPORT TYPE' section has a dropdown menu set to 'Vehicle Activity Tabular'. The 'GROUPS & VEHICLES' section has dropdowns for 'Group' and 'Vehicle', both set to 'ALL'. Below these, there is a list of vehicle IDs under the heading 'ALL (186 Vehicles)'. The 'TIMEFRAME' section has 'Start data & time' set to '7/29/2009 12:00 AM' and 'Stop data & time' set to '7/29/2009 11:59 PM'. A calendar widget is visible, showing the month of July 2009. At the bottom of the form, there is a 'Generate Report' button. The browser's status bar at the bottom shows the address 'http://localhost:1093/RSIWebAVL/Reporting.aspx' and the page title 'RSI AVL Web Tracking Page Method'.



### Breadcrumb Replay Feature

The RSI AVL system allows you to watch a historical “replay” of any portion of a vehicle’s activity history at various speeds. Controls let you play, pause, rewind, and fast forward the replay allowing you to watch the vehicles’ movement and behavior including location, device activities, alerts, status changes, events, etc. Each breadcrumb icon represents a vehicle position and all its underlying data including address, direction, speed, and status. Breadcrumb icons can be customized to represent various statuses and events, such as ignition off/on, or a device is activated (broom, plow, armature, PTO, etc.)



RSI AVL Web Tracking Page Method - Windows Internet Explorer

http://localhost:1093/RSIWebAVL/Reporting.aspx

File Edit View Favorites Tools Help

Go: glc Search Translate AutoFill

RSI AVL Web Tracking Page Method

**Radio Satellite Integrators** RSI AVL Web Tracking

MAP-BASED REPORTS TABULAR REPORTS

Main Report 100%

**Radio Satellite Integrators**

**Vehicle High Speed Report (Tabular)**

Start Time: 2008-01-02 03:45:00 Stop Time: 2008-01-02 22:15:00

Group Selection: ALL VEHICLES

Generated On: 6/23/2008 2:23:41 PM

VEHICLEID	TIMEFIX	LOCATION	SPEED	HEADING
200209	2008-01-02 07:16:53	3216 E THOMAS AVE	75.90	272.00
200209	2008-01-02 07:17:53	310 N SIERRA VISTA AVE	77.31	269.70
200209	2008-01-02 07:18:53	3201 E LEWIS AVE	80.17	269.90
200209	2008-01-02 07:19:53	1940 E HARVEY AVE	71.58	233.30
200157	2008-01-02 05:22:52	6255 N BRYAN AVE	75.90	314.70
200149	2008-01-02 04:46:05	2207 E NORWICH AVE	76.43	180.60

6255105015, 2183152.759 Local Intranet 100%

*Note: Your user interface will differ depending on customized configuration and preferences.*

## **Reports**

The RSI AVL system comes with a suite of standard graphical and tabular reports that cover all the main vehicle activities that one would expect from an industry leading AVL system. We have spent years working with hundreds of fleet customers to refine our report offerings to encompass the most useful and important reports. Some of our standard reports are:

- Vehicle Activity
- Travel & Stop
- Speed
- Geofence
- Vehicle Usage (Mileage & engine hours)
- Vehicle Inactivity (Idle time)
- Sensor Reports (armatures, PTO, broom, plows, etc.)

## **Custom Reports**

RSI will work with the customer to supply a number of customized reports with the system. RSI uses industry standard database and reporting tools (Crystal Reports) so the customer can generate their own customized reports if desired.



**Radio  
Satellite  
Integrators, Inc.**

**City of San Diego**  
**RFP# 10022954-12-Z**  
**GPS System**  
January 18, 2011



**Radio  
Satellite  
Integrators**

## Vehicle Activity Report

2004-09-04

Vehicle ID: M01

Group: A

Generated On: 11/11/2004 12:50:52PM

Time	Description	Location	Stopped Time	Moving Time	Dwell Time
00:00:27	En Route	12874-12949 Ext - 44111		00:01:55	
00:02:22	Stopped	4234-4251 130th St - 44135	00:00:14		
00:02:36	En Route	4234-4251 130th St - 44135		00:00:47	
00:03:23	Stopped	12700-12799 Leela Ave - 44135	00:02:39		
00:06:02	En Route	12700-12799 Leela Ave - 44135		00:01:23	
00:07:25	Stopped	12900-12999 Bellaire Rd - 44135	00:00:25		
00:07:50	En Route	12900-12999 Bellaire Rd - 44135		00:07:35	
00:15:25	Stopped	17909-17909 Groveland Ave	00:28:56		
	Ignition OFF				

00:43:20

00:43:41

00:43:51

00:44:21

00:45:39

00:46:09

00:49:35



**Radio  
Satellite  
Integrators**

## Vehicle Armature Report B (Tabular)

Start Time: 2007-01-26 06:00:00 Stop Time: 2007-01-26 12:00:00

Group Selection: 3800046

Generated On: 1/26/2007 12:13:49PM

Vehicle ID: 3800046

Group: A

<u>TIME/FIX</u>	<u>LOCATION</u>	<u>COUNT</u>
2007-01-26 06:00:04	0-1235 GRIFFITH WAY - f	1
2007-01-26 06:00:29	905-1070 GRIFFITH WAY - f	4
2007-01-26 06:03:53	0-3992 TEILMAN AVE - f	2
2007-01-26 06:04:34	0-3946 TEILMAN AVE - f	1
2007-01-26 06:04:59	0-0 TEILMAN AVE - f	3
2007-01-26 06:06:25	0-3745 TEILMAN AVE - f	1
2007-01-26 06:07:39	1006-1036 DAKOTA AVE - f	2
2007-01-26 06:08:19	1046-1105 DAKOTA AVE - f	1
2007-01-26 06:08:42	1106-1146 DAKOTA AVE - f	3
2007-01-26 06:09:59	0-3795 WEST AVE - f	2
2007-01-26 06:10:23	0-3709 WEST AVE - f	1
2007-01-26 06:10:50	1317-1448 GARLAND AVE - f	2
2007-01-26 06:11:46	1508-1648 GARLAND AVE - f	8
2007-01-26 06:14:05	0-3753 CRYSTAL AVE - f	5
2007-01-26 06:15:50	0-3753 CRYSTAL AVE - f	1
2007-01-26 06:16:05	0-0 WARREN AVE - f	5
2007-01-26 06:17:40	0-3795 WEST AVE - f	3



**Radio  
Satellite  
Integrators, Inc.**

**City of San Diego**  
**RFP# 10022954-12-Z**  
**GPS System**  
January 18, 2011



**Radio  
Satellite  
Integrators, Inc.**

Start Time: August 4, 2008 Stop Time: August 8, 2008

## Vehicle Mileage and Idle Time Report

Group Selection: Group A

Generated On: 8/15/2008 4:45:30PM

VEHICLE ID	TOTAL MILEAGE	ENGINE HOURS	IDLE TIME (>2 min)
360045	23.2	2:12:00	0:52:10
360055	156.7	19:10:34	0:58:00
360056	98.0	15:05:40	0:35:30
360061	80.5	14:30:04	0:29:51
360063	134.8	20:13:30	1:07:56
360069	130.1	13:37:13	2:42:03
360070	17.6	5:30:10	0:56:04
360071	202.9	17:25:21	1:24:30
360072	0	0:00:00	0:00:00



**Radio  
Satellite  
Integrators**

## Vehicle High Speed Report (Tabular)

Start Time: 2008-01-02 03:45:00 Stop Time: 2008-01-02 22:15:00

Group Selection: ALL VEHICLES

Generated On: 6/23/2008 2:23:41 PM

VEHICLEID	TIMEFIX	LOCATION	SPEED	HEADING
200209	2008-01-02 07:16:53	5216 E THOMAS AVE	78.90	272.00
200209	2008-01-02 07:17:53	910 N SIERRA VISTA AVE	77.51	269.70
200209	2008-01-02 07:18:53	3601 E LEWIS AVE	80.17	269.90
200209	2008-01-02 07:19:53	1940 E HARVEY AVE	77.58	255.50
200157	2008-01-02 05:28:52	6255 N BRYAN AVE	75.90	314.70
200149	2008-01-02 04:46:05	2207 E NORWICH AVE	76.48	180.60



## **Optional Custom Garmin Messaging Terminal**

For systems that require integrated messaging and navigation capabilities for its drivers, RSI offers a customized Garmin navigation solution. This customization process allows us to use the Garmin unit as a messaging terminal providing both free form and pre-programmed status messages between the driver and the dispatch user. Leveraging the universally familiar Garmin color touch screen interface, RSI creates a powerful messaging and data terminal for your drivers. In addition to providing the standard Garmin navigation tools, the RSI customization allows the mobile user to receive dispatched destinations, way points and routes from the base directly to the Garmin unit, which will then navigate them to that location. Drivers can login to the system using a Driver and Route Login form, as well as send any variety of free form or preprogrammed status message to the base. The customization options are endless. RSI will work with you to determine how we can implement a system that fits your needs at the lowest cost possible.

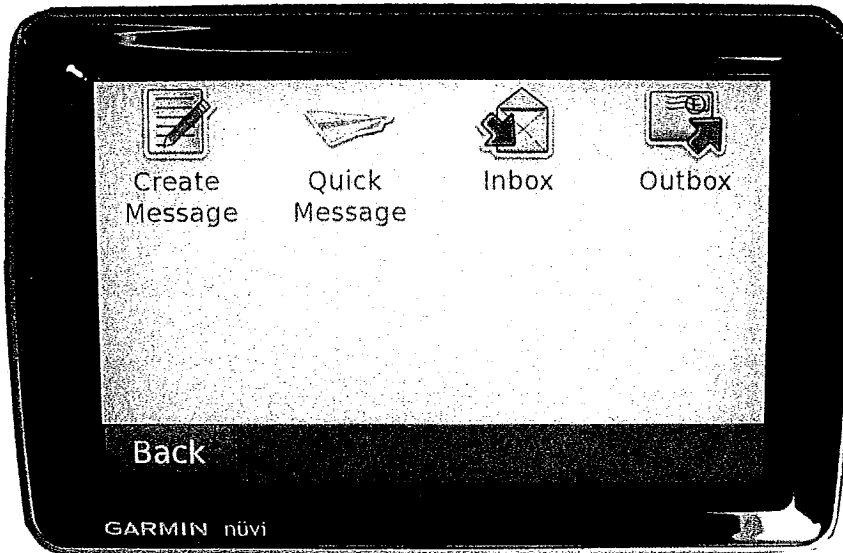


# **GARMIN™**

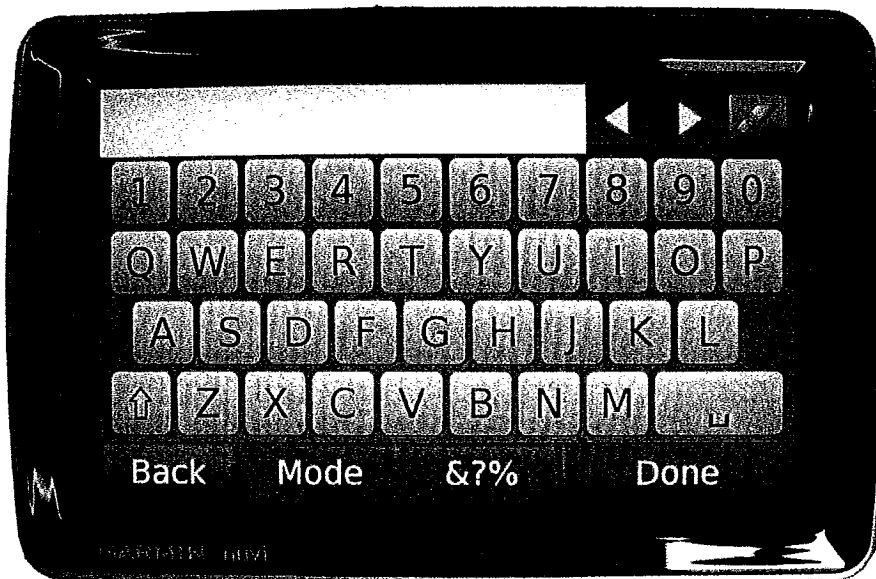




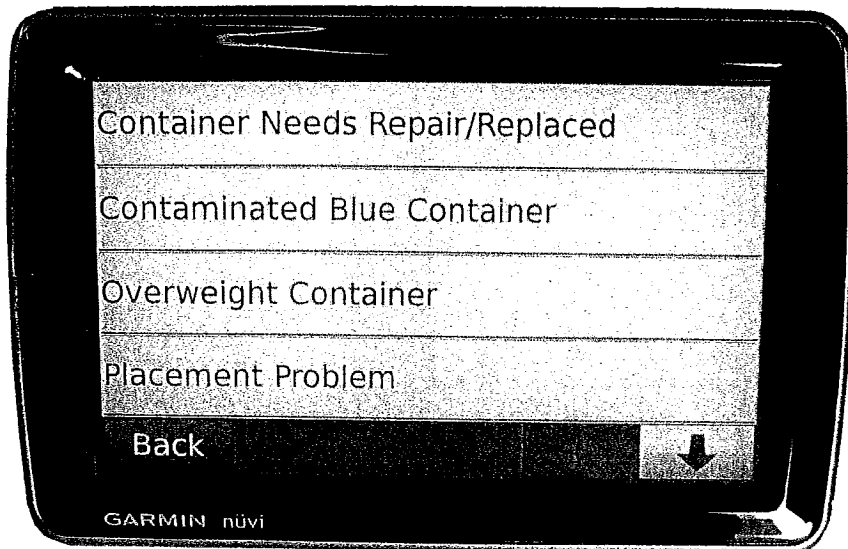
### Customized Messaging Terminal



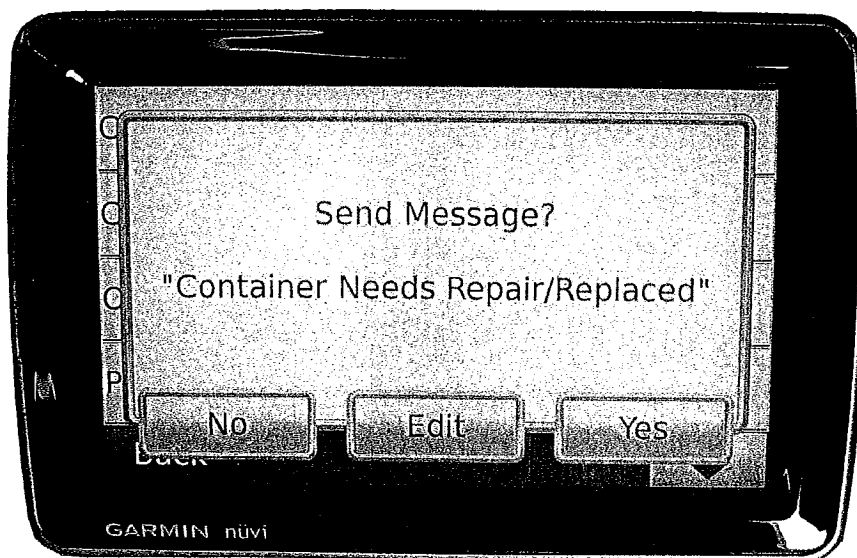
The RSI Garmin Unit can be configured to provide a simple two-way messaging interface between the driver and AVL mapping operator. All messages sent by the driver are time and location tagged and can be used for a variety of status updates and activity reporting.



Messaging can be either free form text messages or preprogrammed (canned) status messages.

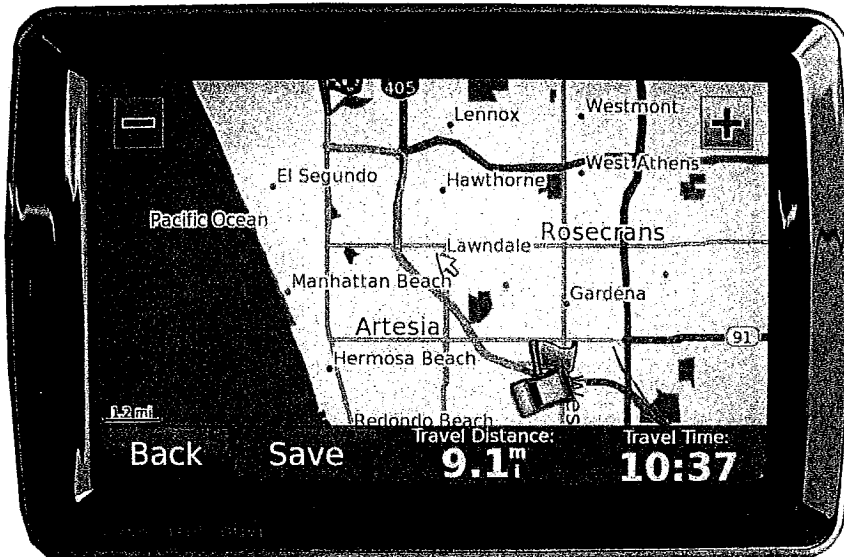


Canned messages can be custom created by RSI for any of your fleet's unique operations, priorities, and terminology. The driver simply selects a preprogrammed message to be sent back to the operator and system.

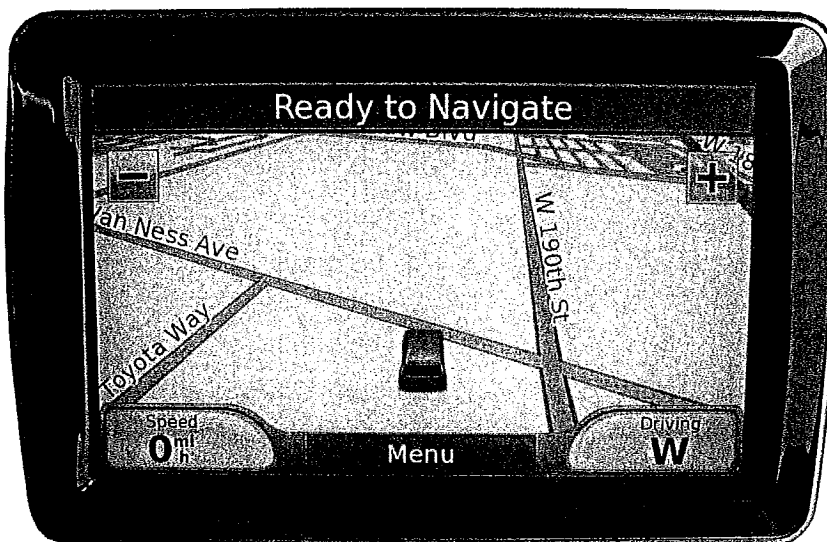




### Garmin Navigation Tools



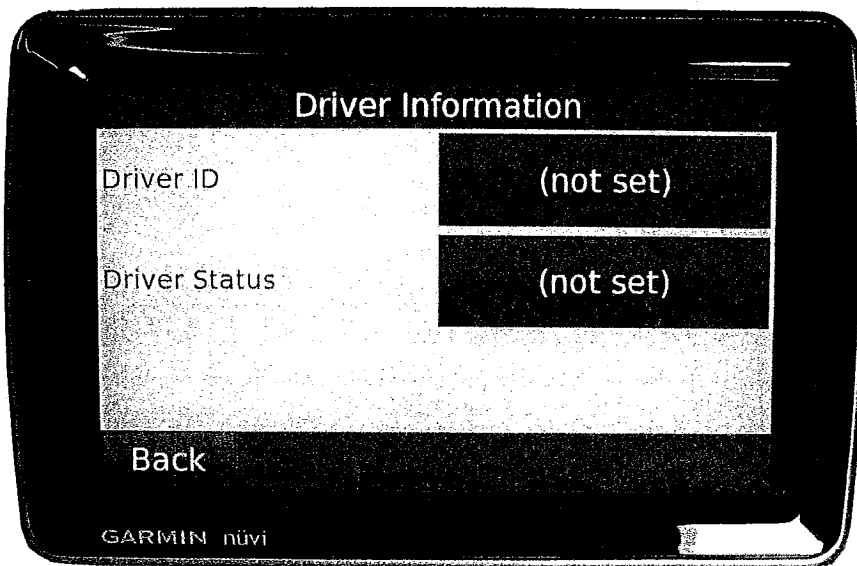
The RSI Garmin Unit also retains its core Garmin navigation functionality that provides voice guided turn by turn directions to the desired destination.



The RSI Garmin Unit has multiple settings for a viewing the map and route as the driver is guided to the destination



Driver ID Entry



The RSI Garmin Unit allows the driver to log in to a vehicle with a unique ID as well as status.



## Typical Base Project Plan

1	0%	<b>AVL Project Completion</b>	<b>101 days</b>	Dpd	
2	0%	Receipt of Order	1 day		Customer
3					
4	0%	<b>Initial Phase</b>	<b>15 days</b>		
5	0%	<b>Design Review</b>	<b>15 days</b>		
6	0%	Develop Design Review	10 days	2	RSI
7	0%	Submit Design Review	5 days	6	RSI
8	0%	Design Review Acceptance	0 days	7	Customer PM
9	0%	<b>Base station System Install/Config</b>	<b>10 days</b>		
10	0%	Base Servers	10 days	2	RSI
11	0%	GIS Map Data	5 days	2	Customer GIS
12					
13	0%	<b>Acceptance Test Plan (ATP)</b>	<b>15 days</b>		
14	0%	Develop ATP	10 days	2	RSI
15	0%	Submit ATP	5 days	14	RSI
16	0%	ATP Acceptance	0 days	15	Customer PM
17	0%	<b>Rollout Phase</b>	<b>100 days</b>		
18	0%	<b>System Delivery</b>	<b>29 days</b>		
19	0%	<b>Mobile Unit Build Procurement</b>	<b>24 days</b>		
20	0%	<b>Building and Procurement</b>	<b>19 days</b>		
21	0%	Mobile Units	19 days	2	RSI
22	0%	<b>Testing</b>	<b>5 days</b>		
23	0%	Mobile Units	5 days	24	RSI
24	0%	<b>Shipping</b>	<b>5 days</b>		
25	0%	Mobile Units	5 days	26	RSI
26	0%	<b>System Completion</b>	<b>71 days</b>		
27	0%	<b>Configuration</b>	<b>10 days</b>		
28	0%	<b>AVL Software Customization</b>	<b>10 days</b>		
29	0%	Base Station (Software)	10 days	27	RSI
30	0%	<b>Installation</b>	<b>60 days</b>		
31	0%	Mobile Units	60 days	31	RSI/Sub Contractor
32	0%	<b>Testing</b>	<b>1 day</b>		
33	0%	Complete ATP	1 day	33	All
34	0%	<b>User Training</b>	<b>8 days</b>		
35	0%	Develop User Training Plan	5 days	32	RSI / Customer PM
36	0%	Complete User Training Plan	3 days	39	RSI

*RSI will work with your team to determine specific timelines based on your particular project scope. Your actual project plan will differ from this one.*

After execution of the contract, RSI and the City will expand and create a detailed Project Implementation Plan mutually acceptable to both parties. Various items (which will be determined by the city after execution of contract) will shape the final schedule, including information such as: quantities, device type, options, configurations, availability of city vehicles/staff, and timing of purchase orders.



## **Key RSI Staff**

### **Project Manager**

Brian Burda, Vice President Technology

Education: B.S. Computer Science, University of Southern California

Experience:

Consultant, Process Control and Software Development, Clients include H.J. Heinz, United Airlines, ORE-IDA Foods, Weight Watchers, and the Marriott Hotel Corporation

\*Brian has 20 years of experience implementing AVL and tracking systems using GPS.

*Brian will serve as the lead project manager for the AVL implementation. Brian has extensive experience implementing AVL systems and will oversee the development of the Scope of Work and Implementation Work Plan.*

### **Lead Software and Hardware Integration Manager**

Mark Holzworth, Director of Software Engineering

Education: B.S. Electrical Engineering, University of California at Santa Barbara

Experience:

Software engineer, Professional Products, Magellan Systems Corporation

\*Mark has over 18 years of experience in developing software to interface GPS and GIS, and embedded network communications control systems for AVL.

*Mark will oversee all integration efforts for this system. Mark has extensive experience interfacing various back end applications with the RSI AVL system.*

### **Executive Contact**

Jonathan Michels, President

Education: B.S. Economics, Wharton School of the University of Pennsylvania  
M.B.A., AGSM, University California at Los Angeles

Experience:

Director, Professional Products Division, Magellan Systems Corporation (GPS Manufacturer)

Vice President, Cellularm, radio frequency data network operator

GIS Analyst, Toyota Motor Sales, USA

\*Jon has over 24 years of experience in GIS, 21 years in RF communications and data, and 20 years in GPS technology.

*Jon will serve as the main point of contact for all contractual and administrative matters for this system.*



## **Installation**

If desired, RSI can be responsible for the installation of all equipment furnished under this contract. RSI will perform the installation and provide local support. RSI will require the client's cooperation and assistance in coordinating vehicle access and availability.

All work will be executed in the manner best calculated, according to local conditions, to promote rapidity and accuracy; to secure safety to life, personnel and property; to assure safe and continuous operation of the existing dispatch, computer, and daily operations; and, to reduce to a minimum any interference with the public and with other contractors in or about the property.

### **Management and Installation**

The installation team manages all aspects of the installation of these units by working closely with client representatives. Together, the installation team and client will identify vehicles and schedule installations on a on a non-intrusive basis. Installation of RSI Mobile hardware units will be verified by inspections. Typically, we perform a physical checkout of the installation, which includes ensuring proper form, fit, security, and location of the unit. In addition, a communications check is performed to ensure that the modem is operational.

### **Operational Checkout**

Upon completion of a small subset of the entire installation, we will perform a complete operational checkout of the hardware and firmware. This checkout will ensure bi-directional communication between the RSI Mobile hardware unit and RSI Base Server and verify the accuracy of receive/transmit (RX/TX) event data shared between the RSI Mobile hardware units and The RSI Base Server software. Upon successful completion of this test, the units and vehicles are tagged as "ready for integration."



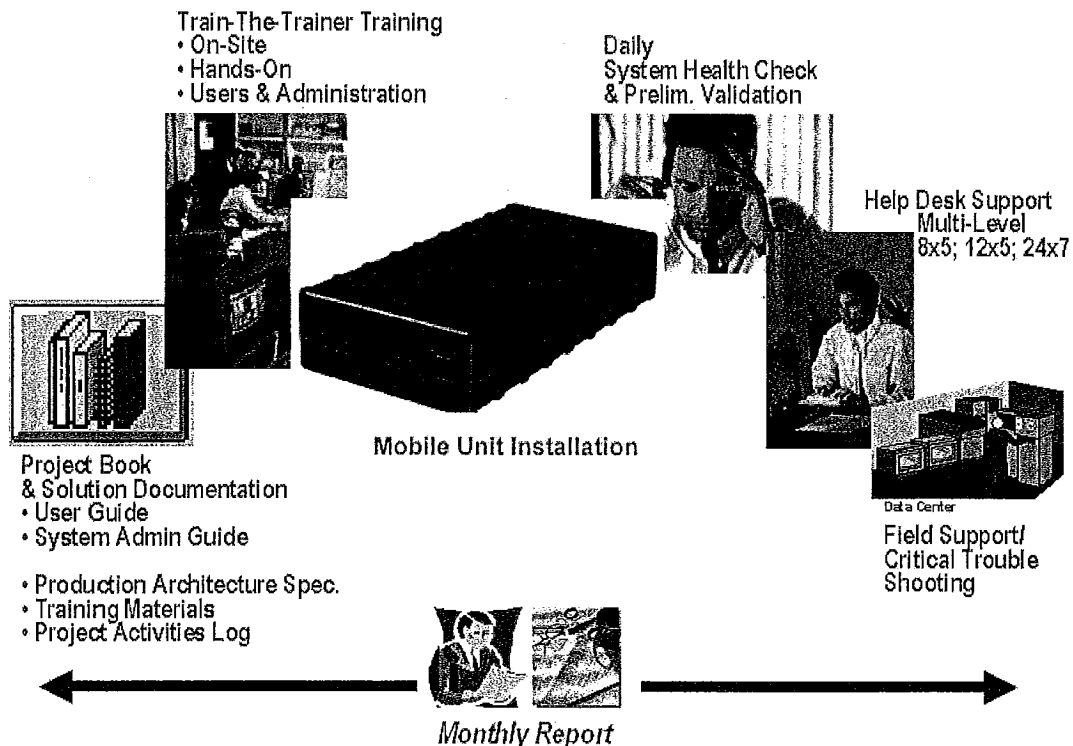
## Training

### RSI Training Methodology

RSI will provide live training sessions on the entire AVL system sufficient to ensure complete understanding and operations proficiency by the desired client staff and administrative personnel. The client will receive training to be provided to the entire staff exposed to the system, with an intensive "train-the-trainer" approach for selected personnel in order to maximize long-term worker productivity. The training sessions shall be held at locations specified by the client for administrative, driver, dispatch, executive, maintenance, and all other relevant parties. All materials and manuals will be provided in both printed and electronic format.

### Training Program Overview

RSI and the other team members will work with the customer's team to define the required courses and a reasonable number of attendees/course duration during the implementation phase of the project.







## **Training Program**

The RSI AVL Training Program is designed to indoctrinate all employees in the use of the RSI AVL System.

All training will be specific, where appropriate, to the RSI AVL system, and will include practical user instruction, hands-on sessions using RSI AVL specific equipment and data, and vendor observation of live operations following system startup. The training sessions will be presented over the course of the project, and will enable customer personnel to assume the responsibility of the system upon Substantial Completion.

In concert with the customer Project Manager, RSI will develop and conduct a one-time operational overview of the entire RSI AVL operating system, which will provide Management with a practical, working knowledge of the RSI AVL system and its operational, customer, and functional capabilities.

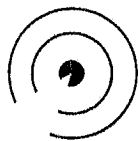
The development of the Training and Orientation Program and the scheduling of the actual training sessions will take into consideration customer staff availability due to shift assignments and logistics. RSI AVL will coordinate with the customer Project Manager to ensure that personnel are available when the Training Programs are to be conducted. Furthermore, it is assumed that all attendees will be familiar with the basic concepts of the Windows Operating System, knowledge that is essential in order to be able to take full advantage of the courses offered. A workable understanding of Windows will be a pre-requisite for all attendees.

## **Advanced Training**

During the installation and testing process there will be a need for certain customer personnel (drivers, dispatchers and supervisors) to become familiar with some of the fundamental aspects of the system so they can participate in the testing process and in the evaluation of the software and system's performance. For this reason, a number of courses will be provided in advance of the Regular Training program. The content of the courses will focus on familiarizing select RSI AVL staff with the basic functionality and operational features of the system, together with 'hands-on' training in the use of the hardware to the extent necessary to support the initial Testing. RSI will provide Advance Training as necessary to support initial testing and integration.

The customer's Project Manager will designate the specific individuals who will participate in this training when RSI indicates it is time to begin the Advance Training Course.

RSI will supply the specified manuals and documentation in both hard and soft copy.



## **Instruction Manuals**

User/Operating Procedure manuals, specific to the RSI AVL System, will be provided to each trainee. The User/Operating Procedure manuals will consist of the generic capabilities for each component as well as all the necessary amendments that describe customer's specific modifications and enhancements. Course Training Manuals, for each functional or technological area of training, will be provided to the customer Project Manager, along with master copies of all training and orientation documents in order to facilitate duplication of materials for future training purposes. Vendor equipment manuals relating to the specific software and hardware utilized in the project will also be delivered to the customer's Project Manager. (Note: Any duplication of materials is for internal use on the RSI AVL Project and may NOT be distributed to outside sources without the written approval of the vendor.)

All such printed training/orientation materials will be:

- Approved by the customer Project Manager prior to their use or distribution
- Customized and specific to the RSI AVL Project and the products used therein and the systems operating therein.
- Complete and current as of the date of Substantial Completion of the RSI AVL Project.
- Easily understandable, detailed and focused to the inherent knowledge levels of each of the below-described staff categories based on their individual 'need to know'.
- Updated, as necessary, consistent with any maintenance and support agreements to this Project.



## **Personnel To Be Trained**

There will be several levels of staffing associated with the RSI AVL operation; therefore, the training and orientation program will focus on both the required ('need to know') and inherent technical expertise of each of the employee groups or individuals, as follows:

### **Drivers**

Anticipated staff (final count TBD)

An in depth orientation in the AVL System function, usage, and dispatching requirements at the vehicle level.

A basic orientation in AVL System functionality and trouble shooting (when to ask for help).

A practical orientation in System capabilities as they relate to overall operations and customer services.

### **Dispatchers**

Anticipated staff (final count TBD)

An in-depth orientation in the usage and a practical orientation in the features relating to operations and customer services of all AVL equipment at the vehicle and Dispatch Center levels.

A basic orientation in function trouble shooting (when to ask for help) at both the vehicle and dispatch center levels.

An in-depth orientation in data entry and retrieval, report design, generation and production.

### **Supervisors**

An anticipated staff (final count TBD)

An in-depth orientation in the usage and a practical orientation in the features relating to operations and customer services of all AVL equipment at the vehicle and Dispatch Center levels.

A basic orientation in function trouble shooting (when to ask for help) at both the vehicle and Dispatch Center level.

The ability to train new drivers, dispatchers and supervisors in the use of and overall understanding of system functionality as it relates to all components and features of the RSI AVL technology.

### **Operator Management**

An anticipated staff (final count TBD)

An in-depth orientation in the usage and a practical orientation in the features relating to operations and customer services of all AVL equipment at the vehicle and Dispatch Center levels.



A basic orientation in function trouble shooting (when to ask for help) at both the vehicle and Dispatch Center levels.

An orientation in systems management, the interoperability of the overall RSI AVL system capabilities, customer service features and potential report development and generation.

Maintenance monitoring requirements of the equipment and software and system repair and service procedures.

### **Client Management**

An anticipated staff (final count TBD), including the Director, Information Systems Manager and administrative staff. (final count TBD)

An in-depth orientation in the usage and a practical orientation in the features relating to operations and customer services of all AVL equipment at the vehicle and Dispatch Center levels.

A basic orientation in function trouble shooting (when to ask for help) at both the vehicle and Dispatch Center levels.

An orientation in systems management, the interoperability of the overall RSI AVL system capabilities, customer service features and potential report development and generation.

Maintenance monitoring requirements of the equipment and software and system repair and service procedures.

*Note: The Information Systems Manager will be trained to a significantly higher technical level. This individual will perform technical maintenance, hardware repair/replacement, troubleshoot problems, investigate communication system problems (LAN, WAN, etc.) and deal with all technical problems and upgrades in cooperation with RSI.*



## **Test and Implementation Plan**

The major purpose of the Implementation Plan is to define a process for deploying the technical elements of the RSI AVL Project, and then schedule the integration of these elements into each agency's operating system. This transition not only calls for a partial re-deployment and enhancement of the current rolling stock, but also for the smooth integration and deployment of the AVL technology that is specified in the Scope of Work. In order to make the transition as smooth as possible and overcome any functional, technical, operational, and communication difficulties as they arise, RSI will utilize a phased approach.

At the same time, in order to ensure the final delivery of a system that conforms to the Project requirements, significant emphasis will be placed on the importance of achieving the operational and technological functionality defined in this Scope of Work and other 'Contract Documents'. The Implementation and Test Plan represents the vehicle through which RSI shall examine each operating function of the RSI AVL system to:

- Verify compliance with the system specifications, level of service standards and operating performance criteria
- Obtain client's acceptance.

RSI will be responsible for component specific testing. As integration of the technical components begins, client's Project Manager (& necessary staff) will oversee and coordinate the implementation of the integration testing in order to ensure compliance with the overall project and performance objectives set forth herein. The anticipated dates for conducting the required testing are defined in the Project Work Plan and will be finalized during the Design Review.

Two levels of system testing will be employed during the course of the RSI AVL Project, as follows:

**Laboratory:** individual module testing followed by integration testing to ensure the functionality of the components and the interoperability of the data interfaces between each component prior to deployment.

**Acceptance Testing:** the final test to ensure that each technical component of the system as well as the total system (technical components and operating services) conforms to system specifications, level of service standards and operating performance criteria.

As each service element comes on-line during the Test, it will remain on-line at the conclusion of the test and be operated in parallel by the Dispatch Center with the other elements that are already operational. The same will hold true for the activated functionalities of the project technologies mentioned above. Due to the linear approach of the project plan, if any of the elements fail during testing, further elements cannot be deployed until the problem has been resolved.



At the conclusion of each formal testing phase, RSI will provide client with written certification of the test results and performance compliance for each of the system components. In the event of testing problems, client, RSI and the appropriate agencies will meet and confer on the results of the testing performed. Subsequent decisions to proceed with the project must be approved by all parties. All the participants must attend scheduled meetings through means of conference calls or on-site visitations.

Also, final details of the Laboratory and Acceptance Tests will be confirmed with the Stakeholders before implementation of the testing in order to ensure client service level does not degrade below current service levels during the testing process.

Finally, in addition to the above formal testing procedures, there will be a comprehensive demonstration of the operating system to client. This demonstration (Acceptance Test) is necessary in order to satisfy the parties that Substantial Completion has been achieved.

### **Acceptance Testing**

There are two fundamental aspects to the Acceptance Testing – functional and operational. The functionality of the RSI AVL System will have been completely tested by the Test phase of the project. To a lesser extent, the ability of the user to change the operational parameters in order to change the service provided will have also been demonstrated. As a consequence, the Acceptance Test is largely a confirmation of the functional requirements and a stress / full loading test of the operation as the service parameters are changed based upon real time public demand.

Because of the inherent inability to predict the need for service changes, it is only by observing the system over a period of time that we can be reasonably assured that all the possible combinations and scenarios have been considered. During the Acceptance Testing the performance of the System will also be evaluated, with regard to the ability of the system to respond in a timely and efficient manner to customer oversight and customer requests.



## **Warranty**

As an expression of confidence in our products to continue meeting the high standard of reliability and performance that our customers have come to expect, Radio Satellite Integrators products are covered by the following warranty.

Radio Satellite Integrators warrants all products against defects in materials and workmanship for a period of one year from the date of factory sale, or the term outlined in an extended warranty agreement. During the warranty period Radio Satellite Integrators provides the warranty service. Radio Satellite Integrators will, at its option, either repair or replace products which prove to be defective. The Customer shall prepay shipping charges for products returned to Radio Satellite Integrators for warranty service and RSI shall pay for return of products to Customer. However, the Customer shall pay all shipping charges, duties, and taxes for products returned to Radio Satellite Integrators from outside the United States. This warranty shall not apply to damage resulting from:

- Improper or inadequate maintenance by the Customer
- Customer-supplied interfacing
- Unauthorized modification or misuse
- Operation outside of the product environmental specifications
- Improper installation, where applicable

No other warranty is expressed or implied. Radio Satellite Integrators specifically disclaims the implied warranties of merchantability and fitness for a particular purpose. Remedies provided herein are Customer's sole and exclusive remedies. Radio Satellite Integrators shall not be liable for any direct, indirect, special incidental, or consequential damages, whether based on contract, tort, or any other legal theory.



## Service Response Plan

### The following is RSI's standard Customer Support Plan:

RSI will maintain all equipment and support software for one year, parts and labor. In addition, RSI will provide two options to help ensure smooth operation of the system:

**1) Phone Support** During the warranty period, RSI will provide unlimited phone support via our toll-free number [(866) 869-7700]. After hours support is available 24/7 through the 911 option on our telephone system.

### **2) Remote Access Support**

This option allows RSI staff to check in on system health, troubleshoot problems on-line with customer staff and monitor the system remotely via dial-up or TCP/IP (VPN) access.

Any travel required to support on-site service is not included.

Severity	Time Reported	Target Response Time	Response Method
1	7x24	<4 Hours	Phone Call (Follow-up with Remote Access Troubleshooting as Necessary)
2	Regular Hours	<3 Hours	Phone Call (Follow-up with Remote Access Troubleshooting as Necessary)
2	After Hours	Next Business Day	Phone Call (Follow-up with Remote Access Troubleshooting as Necessary)
3	Regular Hours	<8 Hours	Phone Call (Follow-up with Remote Access Troubleshooting as Necessary)
3	After Hours	Next Business Day	Phone Call (Follow-up with Remote Access Troubleshooting as Necessary)

The Customer acknowledges and understands that the Service Provider's ability to respond within these times is dependent on the Customer's fulfillment of its obligation to provide remote access. \* Response time targets are measured from receipt of first notification by telephone to our Main Office Number [(310) 787-7700] or toll-free number [(866) 869-7700]. For after hours calls follow our instructions for Emergency Service, directory 911. A page will go out to an on-call support provider.

*\*\*Regular Hours are defined as Monday through Friday, 9 A.M. to 5 P.M. Pacific Time, excluding holidays. After Hours are all non-Regular Hours.*





### Problem Severity Definitions

- a. **Severity 1** – A Severity 1 Problem is a catastrophic failure that severely impacts the Customer's ability to conduct its core business – i.e., the Customer's Automatic Vehicle Locator and/or Mobile Data System are down or not functioning and no procedural workaround exists.
- b. **Severity 2** - A Severity 2 Problem is a high-impact Problem that disrupts important functions of the Customer's operation, but the Customer can still remain productive and maintain necessary business-level operations.
- c. **Severity 3** - A Severity 3 Problem is a Problem that is of lesser magnitude than a Severity 1 or 2 Problem.

### Problem Resolution Targets

- a. **Severity 1** - When working a "Severity 1" Problem, the objective is to resolve the Problem entirely or to downgrade the Problem's Severity designation (*i.e.*, provide Customer sufficient functionality so that the Problem may be reclassified as Severity 2 or 3) within 24 hours after the Problem is reported. Efforts to isolate, diagnose, and effect a work-around for, repair, or downgrade a "Severity 1" Problem shall be continuous (*i.e.*, around-the-clock) between Customer, Service Provider and RSI (as needed), provided that Customer performs all of its obligations hereunder, including providing remote access to its systems. Periodic phone contact and progress updates will be provided at regular intervals during problem resolution. When the severity level has been changed to "Severity 2" or "Severity 3," the guidelines cited below are followed.
- b. **Severity 2** – When working a "Severity 2" Problem, the objective is to have a solution and/or fix to the Customer within fifteen (15) business days. Efforts to isolate, diagnose, and affect a work-around or repair to a "Severity 2" Problem shall be continuous during Regular Hours. Customer resources may need to be available after hours and/or weekends upon mutual agreement between Customer and Service Provider, on a case-by-case basis.
- c. **Severity 3** - When working a "Severity 3" Problem, the objective is to get the Customer a fix to the Problem or develop a workaround acceptable to the Customer within thirty (30) business days. Such a fix will typically be provided via a software patch or upgrade from RSI.



## Response to Specifications

### SCOPE OF SERVICES

#### A. BACKGROUND

The City of San Diego (City) owns and operates a vehicle fleet of 4,050 vehicles consisting of motorcycles, parking enforcement scooters, sedans, law enforcement vehicles, light trucks/vans, medium/heavy duty trucks, fire apparatus, refuse collection trucks, street sweepers, trailers, tractors and industrial equipment. These vehicles support all City services, are assigned to several departments and primarily operate within the city and county of San Diego. The City desires to optimize its vehicle and staff resources by procuring and installing an Automated Vehicle Location (AVL)/ Global Positioning System (GPS) to improve vehicle utilization, employee productivity and safety.

The City of San Diego currently operates several existing AVL/GPS systems including the Police, Fire, Environmental Services and Public Utilities departments. These existing systems represent a variety of components, configurations, complexity and operating characteristics and are independently operated to provide specific data related to each organization's operational needs. The current number of City vehicles with existing AVL/GPS technology is approximately 2,000 leaving approximately 1,800 vehicles that will require future installation of AVL/GPS units.

The goal of this project is to ultimately equip the majority of City vehicles with AVL/GPS technology based on current and future operational needs as well as funding availability. Additionally, the City desires to procure a system that has the capability to track mobile, non-vehicular assets such as laptop computers and cell phones.

It is the intent of this Scope of Work (SOW) of this RFP to acquire the software and hardware necessary to establish an Automated Vehicle Location (AVL)/Global Positioning System (GPS) for City vehicles that do not currently have AVL/GPS systems. The system will: 1) monitor and report vehicle location, heading and usage information (real time and/or historical), 2) provide supervisory/ management staff with vehicle usage information, 3) provide vehicle operating data such as drive train diagnostics/idle time/odometer readings and 4) record and report ancillary equipment usage such as sweeper broom up/down or police siren on/off, etc.

The system envisioned by this SOW will be one that:

1. Provides state of the art, web based AVL/GPS technology and related reporting features.

**Comply. RSI is proposing our state of the art AVL/GPS system that provides real time vehicle tracking and reporting capabilities, as well as a multitude of advanced system options and features. RSI's Web-browser application RSI AVL is actually based on ESRI ArcGIS server that can be used with your own existing ESRI GIS map data. The Base Server manages all fleet communications and configuration, acts as a messaging and data transfer gateway between base-side applications and**



in-vehicle devices, and archives and distributes the vehicle location and status information to the mapping application over the Internet.

2. Provides communications via multiple sources – cellular, WiFi, satellite and 2- way radio systems

**Comply.** For this initial RFP RSI is proposing the use cellular based wireless technologies. RSI can offer several options for wireless communications including cellular (GPRS/GSM/EDGE, CDMA, high speed broad band, etc), WiFi, satellite (Iridium, Inmarsat), and two-way radio (AVL data dedicated systems). RSI can highly customize the system beyond the scope of the RFP in future phases.

3. Provides a centralized and secure AVL/GPS mobile asset “data repository” with departments having the capability to extract information relative to their needs and specific assets.

**Comply.** The RSI AVL system is accessed via the Internet Explorer web browser using unique login and password. The RSI Base server is based on SQL Server and manages all fleet data and archives and distributes the vehicle location and status information. Base servers can be either hosted by RSI or on-premise at the customer site. Through customization, data can be sent or streamed virtually anywhere for customer access in virtually any format (ie. TCP/IP, ESRI Map Services, Web Services, etc.)

4. Provides the ability to leverage the City’s existing ESRI ArcGIS (release 10) mapping technology including GIS data available through the City’s spatial data warehouse.

**Comply.** The RSI AVL application is based on the actual ESRI ArcGIS Server software engine so GIS map options and functions are limitless. The RSI AVL system can use virtually any type of map data, but in particular our software can overlay our AVL information on your own ESRI GIS maps in real time via Map Services. We can access your map data in real time via Map Services if desired.

5. Application must be compatible with Microsoft 2008 server operating system and Windows 2007 / Microsoft XP desktop operating systems.

**Comply.** The RSI AVL system uses Microsoft operating system and products and is accessed via the Internet Explorer web browser.

6. Provides the capability to capture and report vehicle diagnostic information including mobile emissions testing data per the requirements of the State of California

**Comply.** The RSI AVL system can tie into vehicle diagnostics as an option, giving you real-time access to engine trouble codes and other vehicle information. There are a multiple types of diagnostic interfaces depending on vehicle type, make, model, etc. The State of California has discontinued the automated CTP smog check program so this is may not be an option.

7. Provides flexible and user defined data capture reporting and reporting periods



**Comply. Mobile units may be configured to report at virtually any increment or polling rate.**

8. Provides data integration and compatibility with the City's existing Asset Works/Fleet Focus fleet management information system.

**Comply. RSI is able to leverage its vast engineering experience to allow for the easy integration and real-time sharing of all system data with third party applications. In addition, the RSI AVL system provides a wireless gateway for these systems to share and update data from a driver interface in the vehicle. RSI has written interface programs specific to a number of such applications (using methods such as COM/DCOM, ODBC, XML, SOAP, TCP/IP sockets, CORBA, data queues in an AS/400 environment, network files, etc.).**

9. Provides ease of use including standardized viewing screens,

**Comply. RSI provides a user-friendly and intuitive graphical user interface based on ESRI ArcGIS Server. The RSI AVL Application displays the that can be set to display a particular area, route, stop, or address, or to track a specific sub-set of the entire fleet (from the entire fleet to an individual vehicle). Map manipulation tools and buttons are available to zoom, pan, and center the display on a particular vehicle, route, stop, or address. Additional tools are available to enable or disable labeling and to customize the map display according to user preferences.**

10. Provides data view/access via desktop and mobile devices.

**Comply. The RSI AVL application can be accessed by the Internet Explorer web browser. RSI also has a mobile device friendly tracking application for smart phones.**

11. Provides on-site and off-site product support including local (San Diego) vehicle unit installation services as well as routine and warranty maintenance services by an established vendor

**Comply. RSI is a local Southern California company and can perform all installation services (or train city staff) and also subcontract additional companies to provide more local support. Please see Installation.**

12. Provides the flexibility to integrate AVL/GPS data generated from the legacy systems.

**Comply. RSI is highly familiar with using a variety of mobile units including the CalAmp LMU product line as well as other device types. To use these legacy units, RSI will need the permission and cooperation of the previous AVL firm, as redirecting the unit data requires a specific level of involvement and sign-off.**

13. Provides remote user administration tools for generating event notification, alarms and geofences.



**Comply.** The assignment of user-permission levels allows access to appropriate subsets of the installed functionality. Alarm and event notification may be set to notify the user of a status change for a particular vehicle. The RSI AVL system allows the user to set geo-fences on the map display. This geofence will create an alert and/or exception report when breached and will appear as another item of status data with each vehicle position report. Notifications can be sent as an e-mail, SMS, or to the alert screen on the software.

14. Provides remote user administration tools for managing report access and assigning security for data access.

**Comply.** The RSI AVL system can support unlimited simultaneous users. The RSI AVL System provides for multiple access levels for users based on login. Certain privileged users will have the ability to adjust parameters for the AVL system and to configure certain system functions, while others will have limited functionality. The RSI system can be configured so that specific users only have access to specific functionality or vehicle information.

15. Provide for modem replacement within 24 hours and an expectation of 98% of installed devices at all times.

**Comply.** RSI can provide repair/replace service for the mobile units. RSI warrants all products against defects in materials and workmanship for a period of one year from the date of factory sale. RSI will work with the City to make arrangements to have units available for swap/service.

16. Provides the ability to migrate the AVL application to an in-house hosting environment should the City initially select a vendor hosted solution for a specified time period.

**Comply.** RSI AVL Base servers can be either hosted by RSI or on-premise at the customer site. The system can be migrated either way.

For information purposes, this Contract is funded by City of San Diego Master Lease Financing Program.

## B. OBJECTIVE

The objective of this RFP is to make an award to a qualified Contractor which delivers an Automated Vehicle Location (AVL)/Global Positioning System (GPS) that represents best overall value to the City, while meeting or exceeding the specifications and requirements of this RFP.

## C. CORE REQUIREMENTS AND DELIVERABLES

The minimum requirements of the aforementioned AVL/GPS system are:

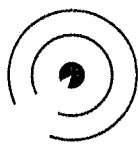


## 1. System Architecture

ITEM	FUNCTION	MANDATORY	HIGHLY DESIRABLE	COMMENTS
a.	The system must accommodate an unbundled and open standard solution (e.g. wireless carrier, hardware devices and existing systems)	X		Comply. RSI AVL can accommodate multiple types of mobile hardware devices as well various wireless carriers.
b.	The proposer must delineate between a inhouse and hosted solution.		X	Comply. RSI AVL Base servers can be <u>either</u> hosted by RSI or on-premise at the customer site. The system can be migrated either way. The system functions would be basically the same- just hosted in different locations.
c.	The system must integrate with the City's existing Assetworks/Fleet Focus management information system	X		Comply. RSI is able to leverage its vast engineering experience to allow for the easy integration and real time sharing of all system data with third party applications. We can interface data using a variety of methods such as TCP/IP, SOAP, XML, Map Services, etc.
d.	The system must run on a platform that will operate with current and future vendor software updates and security patches		X	Comply. RSI AVL system is constantly being updated and upgraded.
e.	The system must be able to be deployed using City infrastructure		X	The RSI AVL system can be either hosted off site by RSI or locally on premise by the customer. The system can migrate either way.
f.	The system must leverage existing City GPS systems by aggregating data from new and existing mobile devices to a centralized AVL (automatic vehicle location) and fleet reporting system	X		Comply. RSI is highly familiar with using a variety of mobile units including the CalAmp LMU product line. To use these legacy units, RSI will need the permission and cooperation of the previous AVL firm, as redirecting the unit data requires a high level of involvement.
g.	Users must be able to access the system via a web-based interface.	X		Comply. RSI AVL is a Web browser based AVL system either hosted by RSI or locally by the City. The RSI AVL system is accessed via Internet Explorer using unique login and



				password.
<b>h.</b>	The system provides on-line help.		<b>X</b>	RSI provides Remote Access Support that allows RSI staff to check in on system health, troubleshoot problems on-line with customer staff and monitor the system remotely via WebEx or TCP/IP (VPN) access.
<b>i.</b>	The system must monitor vehicle position in real-time (e.g. location, heading, last operated, status).	<b>X</b>		Comply. The RSI AVL system monitors, displays, and logs real time vehicle location and a wide variety of status data.
<b>j.</b>	The system must capture and/or calculates vehicle status (vehicle idle time, on/off, etc.)	<b>X</b>		Comply. The RSI Mobile Unit will be connected to the on-board vehicle power and any sensor signals, to capture vehicle idle time, ignition on/off, etc. Reports can be generated to cover these vehicle activities.
<b>k.</b>	The system must capture vehicle usage (mileage and/or hours).	<b>X</b>		Comply. The RSI Mobile unit will capture/calculate ignition and mileage.
<b>l.</b>	The system must have the ability to regulate frequency of data gathering and reporting in increments from 1 second to 1day intervals	<b>X</b>		Comply. The RSI AVL system can update at virtually any rate. Update rates can adjust dynamically depending on factors such as vehicle status or the triggering of an on-board sensor. RSI typically recommends once per 30-60 seconds, plus all events such as start, stop, turns, ignition, sensors, etc.
<b>m.</b>	The system must be capable of handling 400+ events (on average) every 15 seconds.	<b>X</b>		Comply. The RSI AVL system can handle a tremendous amount of data throughput. The RSI AVL system will need to be scaled up (servers, processors, etc.) as the fleet size grows to much larger numbers.
<b>n.</b>	The system must capture GPS modem time (i.e. time telemetry data are collected) and system update time (i.e. time data are inserted into the database).	<b>X</b>		Comply. Every event is location and time tagged.



<b>o.</b>	The system interface supports XML format.		<b>X</b>	Comply RSI is able to leverage its vast engineering experience to allow for the easy integration and real time sharing of all system data with third party applications. We can interface data using a variety of methods such as TCP/IP, SOAP, XML, Map Services, etc.
<b>p.</b>	The system pushes work orders or other messages [down] to specific devices.		<b>X</b>	As an option RSI can integrate the system to push work orders to a driver interface in the vehicle. This will require interfacing the back end to the work order management system as well as an appropriate driver interface in the vehicle. RSI will work with the City to determine specific functionality and devices.
<b>q.</b>	The system must support the integration of third-party applications by allowing the updating and retrieval of data elements and attributes such as operator, supervisor, vehicle, location, route, status, type, assignments, etc, via a real-time web service interface.	<b>X</b>		Comply RSI is able to leverage its vast engineering experience to allow for the easy integration and real time sharing of all system data with third party applications. We can interface data using a variety of methods such as TCP/IP, SOAP, XML, Map Services, etc.
<b>r.</b>	The system supports direct SQL access to data.		<b>X</b>	Comply. The RSI Base server is based on SQL Server and manages all fleet data and archives. Access to parallel SQL tables can be made available.
<b>s.</b>	The system must support the extraction of data using criteria such as vehicle, route, supervisor, date, time, location, event, or alarm.	<b>X</b>		Comply. Reports may be exported into virtually any format including MS Excel files and SQL format. Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria, and etc. RSI can provide access to raw SQL data as well.
<b>t.</b>	The system shall not be limited by floating and/or seat licenses. Licensing is unlimited and concurrent.		<b>X</b>	Comply. The RSI AVL application is Web browser based and supports unlimited concurrent users.





u.	The system is capable of sending email alerts to multiple recipients when select events occur.		X	Comply. Notifications can be sent as an e-mail and/or SMS to multiple recipients, or sent to the alert screen on the software.
v.	The system must be compatible with the City's long range commercial wireless services to use Sprint.	X		Comply. RSI is proposing mobile units that use the <u>Sprint network, as required.</u> <u>Please note that mobile units using GPRS (AT&amp;T) are much much less expensive and we can use these as an option.</u> RSI can use virtually any wireless carrier for the communications portion of this system.

## 2. Security/Administration

ITEM	FUNCTION	MANDATORY	HIGHLY DESIRABLE	COMMENTS
a.	The system must maintain security by requiring users to enter a user name and a complex password at log in. Password must expire according to City standard regulations.	X		Comply. RSI AVL is a Web browser based AVL system either hosted by RSI or locally by the City. The RSI AVL system is accessed via Internet Explorer using unique login and password.
b.	The system integrates with Active Directory (AD) for user authentication and authorization		X	If the system is hosted locally by the City, the RSI AVL system can be configured to operate with Active Directory. However if RSI hosts the system, further discussion will be needed to determine the feasibility and logic of such an arrangement.
c.	The system must support role-based access to data, functionality, displays, and reports.	X		Comply. The RSI AVL System provides for multiple access levels for users based on login. Certain



				privileged users will have the ability to adjust parameters for the AVL system and to configure certain system functions, while others will have limited functionality. The RSI system can be configured so that specific users only have access to specific functionality or vehicle information.
d.	The system must filter vehicles into certain groups (i.e. Supervisors can see only his/her vehicles, District Managers can see vehicles that belong to their Supervisors, Deputy Directors can see vehicles that belong to their District Managers) via the dynamic integration of 3rd party applications.	X		Comply. The RSI system can be configured so that specific users only view their own vehicle fleet group, but the system will share the same backbone, servers, communications, etc. RSI is able to leverage its vast engineering experience to allow for the easy integration and real time sharing of all system data with third party applications.
e.	The system provides audit capability including logging date, time and user IDs for adds, changes and deletes.		X	Comply. The RSI system monitors user activity.
f.	The system must provide a web-based administration console	X		Comply. The RSI AVL system has extensive administrative functions accessible via the Web interface to super users with specific login based permission.
g.	The system must provide administrative tools that allow:			
	1) Ability to add, modify and delete vehicles	X		Comply. The RSI AVL system is highly customizable and allows the user to add/edit/remove vehicle units and users.
	2) Ability to segregate data and reports.	X		Comply. The RSI AVL system allows users to segregate data and reports according to a variety of statuses.
h.	The proposed solution must have the capability to retain AVL/GPS records indefinitely.	X		Comply. RSI typically archives all data indefinitely and keep about 6 months of data live for reporting. Specific dates from historical data can be restored upon request. The RSI Base server is based on SQL



				Server and we can arrange to have periodic FTP data transfers to the City of raw SQL tables for historical archiving.
i.	The proposed solution must provide immediate access to the AVL/GPS records for 1 year at minimum (from current date).	X		Comply. RSI typically archives all data indefinitely and keep about 6 months of data live for reporting. Specific dates from historical data can be restored upon request. The RSI Base server is based on SQL Server and we can arrange to have periodic FTP data transfers to the City of raw SQL tables for historical archiving.
	1. Ability to add, modify and delete users and roles	X		Comply. The RSI AVL system is highly customizable and allows the user to add/edit individual users by an admin/super user.
	2. Ability to monitor system performance and troubleshoot problems	X		Comply.
h.	The system provides a safe method of establishing communication from mobile device to the server			
	1. Ability to establish communication via outbound network connection initiated by the City.		X	Comply. Each mobile device will have a unique static IP address.
	2. System must have built in security controls to provide safe communication	X		Comply. The RSI AVL system is based on industry standard platforms (Windows, ESRI, SQL, etc.) and we use security protocols and standards that insure safe data transmission.

### 3. GIS/Navigation/Mapping

ITEM	FUNCTION	MANDATORY	HIGHLY DESIRABLE	COMMENTS
a.	GIS viewer optimized for mobile devices (i.e. smartphones, Ipad, etc) is available.		X	RSI AVL has a mobile browser view that allows for simple tracking of



				vehicle locations. A mobile viewer that incorporates GIS is a future feature on the product road map.
b.	The system must integrate spatial data published from the City's (multiple) ESRI Enterprise Spatial Data Warehouse (SDW)	X		Comply. RSI AVL is highly configurable when comes to accessing and sharing GIS data, as our application is based on ESRI ArcGIS Server.
c.	The system accesses GIS data from a web service or directly from the City's ESRI spatial data warehouses.		X	Comply. RSI AVL is highly configurable when comes to accessing and sharing GIS data, as our application is based on ESRI ArcGIS Server.
d.	The system must be compatible with ESRI standard data formats, CADD DWG & DXFs.	X		Comply. RSI AVL is highly configurable when comes to accessing and sharing GIS data, as our application is based on ESRI ArcGIS Server.
e.	The system must provide geo-fencing capability.	X		Comply. The RSI AVL system has highly advanced geofencing functions as it is a full GIS. We can incorporate geofences based on radius, polygons, or even lines. The RSI AVL system allows the user to set geo-fences that are even related to routes and a specified buffer of deviation from said route/line. RSI is able to do this due to the underlying ESRI ArcGIS engine.
f.	The system must provide in-stream reverse geocoding. All telemetry data retains an address. Batch/post processing is provided if real-time in-stream geocoding is not available for all telemetry data.	X		Comply. Since RSI AVL is based on ESRI ArcGIS Server, we are very experienced in this area. RSI reverse geocodes all incoming data to provide for faster data access and reporting.
g.	The system provides vehicle activity replay by user specified parameters including date, time, vehicle(s) and crew(s).		X	The RSI AVL Breadcrumb Replay Feature allows you to watch a historical "replay" of any portion of a vehicle's activity history at various



				speeds for a specific date and time.
<b>h.</b>	The system must symbolize according to alerts (i.e. speeding vehicle, idle vehicles, armlifts, etc.)	<b>X</b>		Comply. The vehicle icons may be configured to indicate (using colors, directional symbols, labels, and size) various vehicle attributes (such as ID, status, speed, idle vehicles, armlifts, etc.)
<b>i.</b>	The system provides turn-by-turn driving directions:			For an in-vehicle solution, RSI offers an optional Custom Garmin Unit that provides turn by turn directions to the desired destination.  For the back end software, RSI is currently developing routing functionality very similar to the below specifications. It should be available later in 2012.
	1) Add stops or barriers		<b>X</b>	In the vehicle, the customized Garmin messaging and navigation terminal can accept customized routes with stops and waypoints.
	2) Import stops or barriers from file		<b>X</b>	Comply. In the vehicle, the optional RSI Garmin Unit allows the mobile user to receive dispatched destinations, way points and routes from the base directly to the Garmin unit, which will then navigate them to that location.
	3) Calculate shortest route by time or distance		<b>X</b>	Comply. The Garmin unit retains is core function as a navigation device.
	4) Provide list of driving directions		<b>X</b>	Comply. In the vehicle, the optional RSI Garmin Unit allows the mobile user to receive dispatched destinations, way points and routes from the base directly to the Garmin unit, which will then navigate them to that location.



	5) Zoom to location on map from list		X	Comply.
	6) Right-turn only for route planning and driving directions		X	The Garmin unit retains is core function as a navigation device. This right turn only function may be a option/feature on some Garmin units.
j.	The system must display last current vehicle location (deltas) for real-time use.	X		Comply. The RSI AVL system monitors, displays, and logs real time vehicle location and status data.
k.	The system must provide multiple methods for moving around the map including mouse or other pointing device and keyboard	X		Comply. RSI AVL has a variety of map manipulation tools.
l.	The system must provide a map based presentation layer with standard spatial functions and basic analysis:			Comply. RSI provides a user-friendly and intuitive graphical user interface based on ESRI ArcGIS Server. The RSI AVL Application displays the that can be set to display a particular area, route, stop, or address, or to track a specific sub-set of the entire fleet (from the entire fleet to an individual vehicle).
	1) Navigation Tools: Zoom in	X		Comply. Map manipulation tools and buttons are available to zoom in the display on a particular vehicle, route, stop, or address.
	2) Navigation Tools: Zoom out	X		Comply. Map manipulation tools and buttons are available to zoom out the display on a particular vehicle, route, stop, or address.
	3) Navigation Tools: Previous extent	X		Comply. In RSI AVL the map display window possesses a full-set of map manipulation and query functionality.
	4) Navigation Tools: Full extent	X		Comply. In RSI AVL the map display window possesses a full-set of map manipulation and query



				functionality.
	5) Navigation Tools: Pan	X		Comply. Map manipulation tools and buttons are available to pan the display on a particular vehicle, route, stop, or address.
	6) Tools: Refresh/redraw	X		Comply.
	7) Tools: Search (i.e. find parcel, address, road name, vehicles, routes, zones, events, etc)	X		Comply. Map query options include the ability to locate an address, vehicle, or stop.
	8) Tools: Proximity, find closest vehicle to location or feature	X		Comply. Map query options include the capability to identify the closest available vehicle(s) to any entered point, address, or incident.
	9) Tools: Measure distance and area		X	Comply. Tools are capable of measuring distance and area- part of our ESRI ArcGIS engine!
	10) Tools: Identify map features	X		Comply. The AVL software has an identify map feature tool.
	11)Map content: Display vehicle bread crumb trail	X		Comply. The RSI AVL system allows you to watch a historical "replay" of any portion of a vehicle's activity history at various speeds. Controls let you play, pause, rewind, and fast forward the replay allowing you to watch the vehicles' movement and behavior including location, device activities, alerts, status changes, events, etc.
	12) Map content: Change layer visibility	X		Comply. In RSI AVL the map display window possesses a full-set of map manipulation and query functionality that can change layer visibility. -part of our ESRI ArcGIS engine!
	13)Map content: Quick themes to allow users to quickly add commonly used themes		X	Since the RSI AVL Mapping application is actually based on the



				actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	14) Map content: Layer transparency	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	15) Map content: Reorder map layers		X	Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	16)Map content: Add layers from predefined list		X	Comply.
	17) Map content: Remove layers		X	Comply.
	18)Map content: Display vehicle detail when mouse over icon	X		Comply. Mouse over reveals a variety of vehicle information and status data.
	19)Map content: Save and load current map settings		X	Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	20)Map content: Maintain multiple personal map settings and only display by user account		X	The RSI AVL system can support unlimited simultaneous users. The RSI AVL System provides for multiple access levels for users. The RSI system can be configured so that specific users only have access to specific functionality or vehicle information.

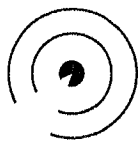




	21) Map content: Dynamic map legend	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	22) Map content: Provide access to metadata	X		Comply.
	23) Overview map	X		Comply. In RSI AVL the map display window possesses a full-set of map manipulation and query functionality. Map manipulation tools and buttons are available to zoom, pan, and center the display on a particular vehicle, route, stop, or address.
	24) Markup Tools: point	X		Comply. Landmarks/Geofences can be created as a configurable radius/polygon/line, as well as created from existing boundaries, landmarks or zones within your GIS as well as in the AVL interface.
	25) Markup Tools: polygon	X		Comply. Landmarks/Geofences can be created as a configurable radius/polygon/line, as well as created from existing boundaries, landmarks or zones within your GIS as well as in the AVL interface.
	26) Markup Tools: poly-line	X		Comply. Landmarks/Geofences can be created as a configurable radius/polygon/line, as well as created from existing boundaries, landmarks or zones within your GIS as well as in the AVL interface.
	27) Markup Tools: circle	X		Comply. Landmarks/Geofences can be created as a configurable radius/polygon/line, as well as created from existing boundaries, landmarks or zones within your GIS



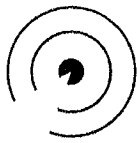
				as well as in the AVL interface.
	28) Markup Tools: text	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	29) Markup Tools: erase	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	30) Spatial Operations: select feature(s) by mouse click	X		Comply.
	31) Spatial Operations: select feature(s) multi-vertex straight line	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	32) Spatial Operations: select feature(s) by freehand line	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	33) Spatial Operations: select feature(s) by multi-vertex polygon	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	34) Spatial Operations: select feature(s) by freehand polygon	X		Comply. Since the RSI AVL Mapping application is actually



				based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	35)Spatial Operations: clear selected feature(s)	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	36) Extract: Create extent for extract	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	37) Extract: Clear extent	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	38)Extract: Export selected data to designated format (i.e. shapefile, csv, txt)	X		Comply. Reports can be exported in virtually any format including shapefile, .CSV, txt.
	39)Print: Standard map by orientation (i.e. Landscape, portrait) with legend, north arrow, visible map layers, user defined print quality and user defined title	X		Comply.
	40)Print: Route maps book pages with index		X	Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.



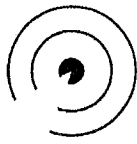
	41)The system provides a map based presentation layer with advanced spatial functions and analysis:			The RSI AVL application is based on the actual ESRI ArcGIS Server software engine so map options are limitless.
	i. Tools: Create, modify and delete spatial bookmarks		X	Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	ii. Tools: feature (i.e. parcels, customers) count by defined geographical area		X	Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	iii. Tools: Route optimization and driving directions		X	<p>The RSI AVL software does not provide directions at this time. However RSI AVL does hyperlink to Google Maps which does provide this function.</p> <p>For the back end software, RSI is currently developing routing functionality very similar to the described specifications. It should be available later in 2012.</p> <p>In the vehicle routing, the customized Garmin messaging and navigation terminal offers turn by turn directions to a destination or can also accept customized routes.</p>
	iv. Map Content: Visualize participation or percentage of route collected		X	RSI can provide a customized report that calculated route percentage completed, if route data can be provided in the proper format.
	v. Map Content: Symbolizes travel path by load		X	The vehicle icons may be configured to indicate (using colors, directional symbols, labels, and size) various



				vehicle attributes (such as ID, status, speed, heading, etc.).
	vi. Map Content: Track vehicles where selected vehicle(s) remain centered on map		X	An autopan feature allows you to replay a vehicle's path and re-center the map when the vehicle moves.
	vii. Map Content: RSS feed of real time traffic conditions		X	This may be an option using Map Services.
	viii. Geoprocessing: Buffer by user defined or pre-defined distance	X		Comply.
	ix. Geoprocessing: Calculate proximity of vehicle(s) to user identified feature(s)	X		Comply. Map query options include the ability to locate a vehicle, along with the capability to identify the closest available vehicle(s) to any entered point, address, or incident.
	x. Vehicle Data extract: By current map extent	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	xi. Vehicle Data extract: By rectangular selection tool	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	xii. Vehicle Data extract: By buffer	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	xiii. Vehicle Data extract: By irregular polygon selection tool	X		Comply. Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS



				Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	xiv. Generate summary statistics by polygon: Sum		X	Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	xv. Generate summary statistics by polygon: Mean		X	Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	xvi. Generate summary statistics by polygon: Standard Deviation		X	Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	xvii. Print: Route maps book pages with index		X	Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
	xviii. Print: Maps in customer-defined layout		X	Since the RSI AVL Mapping application is actually based on the actual ESRI ArcGIS Server users have a wide variety of customizable functions and views on your constantly changing GIS map data.
1.	The system must display vehicle(s) and nonmotorized asset(s) on a map using Department and City approved conventions and symbology.	X		Comply. RSI can customize the map display according to user preferences, ie iconology or symbols for specific statuses. The vehicle icons may be configured using symbols to indicate various vehicle attributes (such as ID, status, speed, heading, etc.).



<b>m.</b>	The system allows users to set preferences controlling how map data are symbolized.		<b>X</b>	RSI can customize the map display according to user preferences, ie iconology or symbols for specific statuses. The vehicle icons may be configured using symbols to indicate various vehicle attributes (such as ID, status, speed, heading, etc.).
<b>n.</b>	The system must export maps in PDF, JPEG format.	<b>X</b>		Comply. Reports can be exported in virtually any format including PDF and JPEG.

#### **4. Vehicle Communication Devices (VCDS)**

<b>ITEM</b>	<b>FUNCTION</b>	<b>MANDATORY</b>	<b>HIGHLY DESIRABLE</b>	<b>COMMENTS</b>
<b>a.</b>	The VCDs must support non-motorized vehicles / assets including rechargeable battery(s) with 6 month life and low battery alert message.	<b>X</b>		Comply. This type of device has a built in battery and can report for months if power to the vehicle is disconnected.
<b>b.</b>	The system has software that allows for inventory, firmware, and configuration management of VCDs and attached sensors.		<b>X</b>	Comply. RSI AVL allows admins to manage units and configuration.
<b>c.</b>	The VCD must be programmable over the air (OTA) or via an on-board interface (serial, ethernet, usb).	<b>X</b>		Comply. The RSI Mobile Unit can be configured over the air.
<b>d.</b>	The VCDs must have the ability to capture and report GPS, Vehicle Diagnostic and Sensor data in real time, and store and forward.	<b>X</b>		Comply. Engine diagnostics can optionally be added to the RSI Mobile Unit giving you real-time access to engine trouble codes and other vehicle information. Diagnostic technologies vary and some vehicles do not have diagnostics.
<b>e.</b>	The VCD must be able to transmit data at 5-second intervals and at every telemetry event.	<b>X</b>		Comply. The RSI AVL system can update at virtually any rate. Update rates can adjust dynamically depending on factors such as vehicle status or the triggering of an on-board sensor. We would highly recommend against updating at 5 seconds- a more manageable rate would be 30 seconds plus events. Too



				much data can be overwhelming and slow down system function and reporting.
f.	The VCDs must interface with OBDII, J-1708 and J-1939 to monitor:			Comply. Engine diagnostics can optionally be added to the RSI Mobile Unit giving you real-time access to engine trouble codes and other vehicle information. Diagnostic technologies vary and some vehicles do not have diagnostics.
	1) PTO (power take-off)	X		Comply.
	2) Power train	X		Comply.
	3) Idling	X		Comply.
	4) Emissions status	X		Comply.
	5) Fuel efficiency	X		Comply.
g.	The VCD must have the capability to support remote sensors and up to 16 inputs (analog and/or digital), including telemetry data such as trash collection arm cycles, doors open, siren on/off, etc.	X		Comply. Each RSI Mobile Unit contains a 50 channel GPS receiver, wireless communications, and optionally with data and sensor ports. One of the units we are offering has 16 sensor inputs.
h.	The VCD has visual indicators or mechanisms to prevent and/or deter tampering.		X	Comply. No device is 100% tamper proof but RSI can help determine an installation plan to minimize tampering etc. If desired a rugged lock box enclosure is available as an option. The device has a built in battery and can notify and report for months if power to the vehicle is disconnected.
i.	The VCD has programming flexibility to support hibernation, wake on call and other ignition on/off behavior.		X	Comply. The RSI Mobile Unit will be connected to the on-board vehicle power and any sensor signals, to display key on/off events. The device can sleep and wake based on specific events.





j.	The VCD has capability of parsing and sending the data to various appropriate applications.		X	Comply. The RSI Mobile Unit can be customized to send/capture specific data as desired.
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## 5. Reporting

ITEM	FUNCTION	MANDATORY	HIGHLY DESIRABLE	COMMENTS
a.	The system reporting function should be available 99% of the time from any computer with City intranet/internet access.		X	Comply. RSI AVL is a Web browser based AVL system either hosted by RSI or locally by the City. The RSI AVL system is accessed via Internet Explorer 7 or higher browser using unique login and password.
b.	The system must export data to Microsoft Excel, XML, and/or CSV format.	X		Comply. Reports may be exported into virtually any format including Excel, XML, and/or .CSV format.
c.	The system must provide a Detailed Summary Report by vehicle and user specified date/time period.	X		Comply. Reports may be produced for selected vehicles (or groups of vehicles) according to date/time period.
d.	The system provides a Duration Report that computes the elapsed time between two statuses such as time spent at site or on the road.		X	Comply. The RSI AVL system comes with a suite of standard graphical and tabular reports that cover vehicle activities such as travel & stop and vehicle usage (mileage & engine hours).
e.	The system must provide an Exception Report that lists all recorded exception conditions	X		Comply. Users can create an alert and/or exception report when triggered and will appear as another item of status data with each vehicle activity or exception report.
f.	The system must provide a Location Event Report which shows the location for selected vehicle(s) by a user specified	X		Comply. Reports may be produced for selected vehicles (or groups of vehicles) according to time, location



	date/time period			and status criteria. The RSI AVL system comes with a suite of standard reports.
g.	The system will provide Off/Out of Service Summary Report that lists the times and duration a vehicle is off/out of the service area		X	Comply. Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria. The RSI AVL system comes with a suite of standard reports.
h.	The system will provide a Detailed Routing Report to include:		X	Comply. Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria.
i.	1) Total stops		X	Comply.
	2) Total drive time		X	Comply.
	3) Total breaks		X	Comply.
j.	The system will provide a Route Compliance Report which details time and miles spent by a vehicle within/outside of a specified distance from a predefined route/path		X	The RSI AVL system allows the user to set geo-fences (in the form of a route) that are related to routes and a specified buffer of deviation from said route/line. RSI is able to do this due to the underlying ESRI ArcGIS engine. Routes must be provided to RSI in the proper format.
k.	The system will provide a Stationary Summary Report which lists the location and vehicle number for all vehicle(s) that exceeded preset stationary vehicle time parameter		X	Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria. This is covered in our vehicle activity report.
l.	The system must provide a Vehicle List Report of active vehicles	X		Comply. Reports may be produced for selected vehicles (or groups of vehicles) according to time, location, and status criteria.



<b>m.</b>	The system must provide an Authorized Personnel Report which lists authorized viewers, roles and rights to the AVL system	<b>X</b>		Comply. The RSI AVL system has an administrative report that details software access and duration by user.
<b>n.</b>	The system will provide a Detailed Speed Report for user specified vehicle(s) by date/time:			The Vehicle Activity reports shows speed for each data point. RSI can provide alerts and reports on speed relative to a global setting. As an option, RSI can create speed reports related to actual speed limit based on the street segment speed attribute data in your GIS.
	1) Real time speed		<b>X</b>	The Vehicle Activity reports shows speed for each data point.
	2) Average speed		<b>X</b>	The Vehicle Activity reports shows speed for each data point.
	3) Maximum speed		<b>X</b>	The Vehicle Activity reports shows speed for each data point.
<b>o.</b>	The system must provide a Diagnostic Summary Report which includes a list of diagnostic information used to determine preventative maintenance (PM) schedule	<b>X</b>		Comply. As an option, the RSI mobile Unit can be connected to any sensor signals such as the engine diagnostics system. The RSI AVL system has a preventative maintenance feature that manages these and other vehicle maintenance issues.
<b>p.</b>	The system provides a Miles Driven report which includes total miles driven user defined time period (i.e by day, week, month, quarter, year), average miles driven by user defined time periods, and comparison of miles driven for multiple vehicles		<b>X</b>	The RSI AVL system comes with a suite of standard graphical and tabular reports that cover all the main vehicle activities such as time period and total miles driven.
<b>m.</b>	The system must provide an Authorized Personnel Report which lists authorized viewers, roles and rights to the AVL system	<b>X</b>		Comply. The RSI AVL system has an administrative report that details software access and duration by user.
<b>n.</b>	The system will provide a Detailed Speed Report for user specified vehicle(s) by date/time: <ul style="list-style-type: none"> <li>Real time speed</li> <li>Average speed</li> </ul>			The Vehicle Activity reports shows speed for each data point.



	<ul style="list-style-type: none"> <li>Maximum speed</li> </ul>			
o.	The system must provide a Diagnostic Summary Report which includes a list of diagnostic information used to determine preventative maintenance (PM) schedule			Comply. As an option, the RSI mobile Unit can be connected to any sensor signals such as the engine diagnostics system. The RSI AVL system has a preventative maintenance feature that manages these and other vehicle maintenance issues.
p.	Ability to calculate and report estimated environmental impact information such as carbon footprint, greenhouse gas emissions, etc.		X	RSI can work with the city to determine how to configure this report.

## 6. GPS Hardware Maintenance/Provider Performance

ITEM	FUNCTION	MANDATORY	DESIRABLE	COMMENTS
a.	The provider is responsible for creating and modifying VCD programming scripts based on departmental requirements.		X	Comply.
b.	The provider is responsible for keeping all VCDS up to date in regards to firmware releases from the manufacturer.		X	Comply. RSI AVL system is constantly being updated and upgraded.
c.	The provider is responsible for VCD inventory and maintains a database of assigned units. This also includes but not limited to IMEI, ESN, Wireless account numbers, IP addresses.		X	Comply. It is assumed that the City will provide ESN and manage the accounts. RSI can provide wireless service if desired.
d.	The provider will ensure spare VCDs are readily available at all times in any event that units need to be swapped out.		X	Comply.
e.	The provider supplies the VCDs preconfigured upon request.		X	Comply.
f.	The provider includes all necessary hardware components to facilitate a complete vehicle installation.		X	Comply. The installation team manages all aspects of the installation of these units by working closely with client representatives
g.	The provider is responsible for all troubleshooting aspects of faulty VCDs, which includes bench testing and coordinating with the manufacturer for repairs.		X	Comply. RSI can provide repair/replace service for the mobile units. RSI warrants all products against defects in materials and workmanship for a period of one



				year from the date of factory sale.
<b>h.</b>	The provider maintains and stores physical inventory of spare VCD equipment, including but not limited to modems, antennae, wiring, cabling, and switches.		<b>X</b>	Comply.
<b>i.</b>	The provider installs, maintains, and upgrades VCDs and attached hardware.		<b>X</b>	Comply. RSI will perform the installation and provide local support. The installation team manages all aspects of the installation of these units by working closely with client representatives.

### 7. Query/Search

ITEM	FUNCTION	MANDATORY	DESIRABLE	COMMENTS
<b>a.</b>	The system can access and retrieve unlimited historical data.		<b>X</b>	Comply- IF the system resides on-premise hosted by the City. If hosted by RSI we typically archive all data indefinitely and keep about 6 months of data live for reporting. Specific dates from historical data can be restored upon request. The RSI Base server is based on SQL Server and manages all fleet data and archives.
<b>b.</b>	The system must provide ad-hoc, custom search capability	<b>X</b>		Comply
<b>c.</b>	The system must provide pre-defined searches:			
	1) By vehicle ID(s)	<b>X</b>		Comply. Vehicles may be displayed for selected groups or subgroups of vehicles according to vehicle ID.
	2) By group or section	<b>X</b>		Comply. Vehicles may be displayed for selected groups or subgroups of vehicles according to location within a specific region.
	3) By alert or event(s)	<b>X</b>		Comply.



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	4) By address(es) or Intersection(s)	X		Comply. The RSI AVL Application has address search function.
	5) By parcel(s)	X		Comply.
	6) By work order(s)		X	Comply. If work orders are provided to RSI (as a consumable Map Service)
	7) By crew(s)	X		Comply. Crews can be defined as a group.
	8) By date	X		Comply. Reports may be produced for selected vehicles (or groups of vehicles) according to date.
	9) By date range	X		Comply.
	10) By week	X		Comply.
	11) By commodity/material type	X		Comply. If commodities data are provided by the City.
	12) By arm lifts per route hour		X	Comply.
	13) By route	X		Comply. If route data is given to RSI by the City in a usable format.
d.	The system must provide minimum of 6 months of historical data that may be visualized through the GIS viewer in support of accident investigations and fact findings	X		Comply. RSI archives all data indefinitely and keep about 6 months of data live for reporting. Specific dates from historical data can be restored upon request. The RSI Base server is based on SQL Server and manages all fleet data and archives.
e.	The system must provide minimum of 1 year of historical data accessible through standard and ad hoc reports in support of accident investigations, fact findings and planning	X		Comply. RSI typically archives all data indefinitely. The RSI Base Server is based on the SQL Server and manages all fleet data and archives. RSI offers tabular reports



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				<p>that display unit location and activity in a text-based spreadsheet or table. Such reports may be exported into virtually any format including MS Excel files and SQL format. Additionally, RSI will provide the files in any format or provide SQL database files with table structures via periodic FTP.</p>
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## Section C – RSI Additional Items

### A) RSI Interface to ESD Applications

The RSI AVL system is capable of interfacing AVL data to the ESD's three specifically outlined applications (ARTS, FSD, and Routing) as per the descriptions below and in discussions between RSI and the City. RSI is responsible for its own side of the interface only. Additional configuration, products, and costs required by the third party provider of the applications are not the responsibility of RSI.

#### 2.1 ARTS (Automated Refuse Tonnage System)

ARTS is a custom application that uses an Oracle Database. Changes in ARTS, including vehicle assignments involving route, crew, and supervisor, are automatically uploaded to the AVL database and reflected in the online presentation. Changes in ARTS cause retroactive changes to GPS event records related to a specified vehicle. Changes are typically made several times a day. Authorized users such as Supervisors can view real-time vehicle location along with current vehicle assignment information from within the online presentation.

*Update Vehicle Assignment*

Inputs:

Attribute	Type	Description
VEHICLE ID	Varchar32	Unique key. Currently this is the Modem ID.
DRIVER FIRST NAME	Varchar14	Assigned driver first name
DRIVER LAST NAME	Varchar24	Assigned driver last name
SUPERVISOR ID	Varchar4	Matches supervisor acct name in ARTS and EPACS.
ROUTE ID	Varchar6	Externally-created route numbers.
COLLECTION TYPE	Char3	Ordinate values 000-055
COLLECTION INDICATOR	Char1	Ordinate values a-k
RETROACTIVE CHANGE START*	Varchar4	24-hr time to bracket changes
RETROACTIVE CHANGE END*	Varchar4	24-hr time to bracket changes

\*optional – These attributes do not currently exist.

Outputs: None



### 2.3 FSD (Fleet Status Display)

FSD is a custom application that retrieves data from an Oracle database. FSD uses data from the AVL system combined with information from other sources such as ARTS to determine trucks that are on route, at the landfill, or at the yard. This information is retrieved for all trucks constantly and displayed in a tabular view-only format in real-time.

#### *Retrieve Vehicle Location:*

Inputs:

Attribute	Type	Description
VEHICLE ID	Varchar32	Unique key. Currently this is the modem ID.

Outputs:

Attribute	Type	Description
LOCATION	Varchar500	Keywords are "FSD Yard" and "FSD Landfill"; based on geofences.

Vehicles with no GPS events for the current day return NULL.

### 2.4 RouteSmart

RouteSmart is a COTS application that uses data from the AVL System in conjunction with data from other sources such as EPACS and ARTS in the planning, design and generation of routes for the Environmental Services Trash, Recycling, and Greenery collection services for the City of San Diego. Typical data retrieved from AVL is event-based, route-based, vehicle-based, or collection type-based.

## B) Requests For City Data

RSI agrees to copy, destroy or return vehicle data to the City in any format upon request.

### C) RSI Mobile Unit Features Matrix

City of SD Name	RSI Name	Features
Type 1	LMU 4200 Sprint	OBDII/JBus + 16 sensors
Type 1	LMU 4200 ATT	OBDII/JBus + 16 sensors
Type 2	LMU 3000 Sprint	OBDII only
Type 2	LMU 3000 ATT	OBDII only
Type 2	LMU 2720 Sprint	OBDII/JBus + 5 sensors
Type 2	LMU 2720 ATT	OBDII/JBus + 5 sensors
Type 3	LMU 2720 Sprint	Added Battery
Type 3	TTU 1210 ATT	Battery power (AT&T)
"GPS Logic"	Vanguard 3000	3G – GOBI - WiFi

### D) OBD-II Data Matrix

"Basic Unit" denotes that this data is available with the basic RSI Mobile Unit without OBD-II diagnostics.

Data	Availability
Engine Hours	Basic Unit
Mileage	Basic Unit
Speed	Basic Unit
Idle Time	Basic Unit
Harsh Acceleration/Deceleration	Basic Unit
Fuel Efficiency	<b>Needs OBD-II</b>
Diagnostic Trouble Codes	<b>Needs OBD-II</b>
Check Engine Light	Basic Unit (optional)

### E) Specialty Sensors and Installation Costs

The RSI Mobile Unit has the input capability to tie in to various sensors monitoring device activity on the vehicle. Typically we can make a simple connection to an existing sensor or switch to capture usage based on on/off or voltage high/low. This includes devices that have electrical on/off controls such as lights, sirens, PTO's, etc. Interfacing to these types of sensors is relatively simple and included in the cost of the initial standard installation.

Occasionally there are devices that require additional sensor equipment in order to capture the true device activation. Examples of this are for mechanical or hydraulic type mechanisms that do not have power switches. Adding sensors to these types of mechanisms can be more complex and require items such as magnetic proximity sensors or in-line hydraulic pressure sensors. **The price of these types of additional sensors vary** and RSI can direct the city to the appropriate sensors to purchase. In certain installation situations such as in-line hydraulic pressure sensors, RSI can assist/consult/train the City mechanics with the installation, but we will not want to cut into the City's hydraulic lines ourselves. Once the city can install and provide the desired sensor signal, we can connect it to the RSI Mobile Unit.

**SECTION D**  
**PACKAGING AND MARKING**  
**(RESERVED)**

## **SECTION E**

### **INSPECTION AND ACCEPTANCE**

The City of San Diego's Deputy Director – Fleet Services, or designee, will be responsible for inspecting and accepting all work, documents and information received from the Contractor (same as Contract Administrator) for the scope of services specified herein.

Inspection and acceptance will occur at destination (specific work site destinations and addresses will be furnished upon award) unless specified otherwise, and will be made by the City department shown in the shipping address of the Purchase Order if applicable, or other duly authorized representative of the City.

Risk of loss or damage to deliverables prior to the time of their receipt and acceptance by the City is upon the Contractor. The City has no obligation to accept damaged and/or non-functional deliverables and reserves the right to return or reject them, at the Contractor's expense, damaged and/or non-functional deliverables even though the damage and/or non-function was not apparent or discovered until after receipt.

## **SECTION F**

### **DELIVERIES OR PERFORMANCE**

#### PERIOD OF PERFORMANCE

Contractor shall perform services as described in Section C for the period identified in the Notice to Proceed, with Options to Extend, if any, at the sole discretion of the City, in accordance with Section I.05 of this RFP.

Delivery shall be made in accordance with the Contract Documents (see Section I.01, "Definitions"). The City, in its sole discretion, may extend the time for delivery as specified in Section I, General Contract Clauses. The City may order, in writing, the suspension, delay, or interruption of delivery of goods or services.

The Contractor shall immediately notify the City in writing if there are, or it is anticipated, that there will be a delay in performance. The written notice shall include an explanation of the cause for, and a reasonable estimate of the length of the delay. If in the opinion of the City, the delay is material, and the circumstances are within the control of the Contractor, the City may terminate this Contract as provided in Section I.

If delays in the performance are caused by unforeseen events beyond the control of the parties, such delay may entitle the Contractor to a reasonable extension of time, but such delay shall not entitle the Contractor to damages or additional compensation. Any such extension of time must be approved in writing by the City. The following conditions may constitute such a delay: war; changes in law or government regulation; labor disputes; strikes; fires, floods, adverse weather or other similar condition of the elements necessitating cessation of the performance; inability to obtain materials, equipment or labor or other specific reasons agreed to between the City and the Contractor; provided, however, that: (a) this provision shall not apply to a delay caused by the acts or omissions of the Contractor; and (b) a delay caused by the inability to obtain materials, equipment, or labor shall not entitle the Contractor to an extension of time unless the City has received, in a timely manner, documentary proof satisfactory to City of the Contractor's inability to obtain materials, equipment, or labor.

## SECTION G

### CONTRACT ADMINISTRATION DATA

The Contract Administrator for this service is the City of San Diego's Deputy Director – Fleet Services or designee. The Contractor Administrator will provide daily oversight of this contract to ensure compliance. The Purchasing Agent shall be responsible for all contractual matters and is the only individual authorized to make changes of any kind to the contract. The Contractor shall not rely upon any oral change from anyone, or a written request for change from someone other than the Purchasing Agent. All changes must be in writing, signed by the Purchasing Agent.

#### INVOICING AND PAYMENT

1. This Contract is funded mainly by the City of San Diego's Master Lease Financing Program which is managed by the City's Debt Management Department. The current financing deadline for this project is June 30, 2013. Invoices must be submitted in duplicate (one copy to be marked "original") to the following location for purchases that are funded by the Financing Program. The City may issue Purchase Order(s) for purchases being made by various City Departments that are not being funded by the Financing Program. In those cases, invoices must be submitted in the same manner as described in this section, but must be sent to the Billing location specified in the Purchase Order.

The City of San Diego  
Deputy Director – Fleet Services  
Department of Public Works  
3940 Federal Blvd.  
San Diego, CA 92102

All invoices shall conform to policies or regulations adopted from time to time by the City of San Diego. Invoices shall be legible and shall contain, as a minimum, the following information: (1) the contract and purchase order number (if any); (2) a complete itemization of all costs including quantities ordered and delivery order numbers (if any); (3) any discounts offered to the City of San Diego under the terms of the contract; (4) evidence of the acceptance of the supplies or services by the City of San Diego; (5) unique traceable invoice number(s); (6) a copy of all records supporting a copy of all records supporting Small Local Business Enterprises (SLBE) and Emerging Local Business Enterprises (ELBE), Disadvantaged Business Enterprise (DBE), Disadvantaged Veterans Business Enterprise (DVBE), Minority Business Enterprises (MBE) and Women-Owned Business Enterprise (WBE) vendor/contractor participation for the payment period to be sent under separate cover to Program Manager, Office of Equal Opportunity Contracting, 1200 Third Avenue, Suite 200, San Diego, CA 92101; (7) total charges billed at this time and date; and (8) total payments received to date.

2. Upon review and approval from the Department of Public Works (or from the Department designated on a Purchase Order), invoices shall be forwarded to Debt Management Department (or to the Comptroller for Purchase Orders) for payment. The approval shall be electronic.
3. Subject to the withholding provisions of the contract, if any, payment shall be made within thirty (30) days after the City of San Diego's receipt of a properly prepared/approved invoice.
4. The Contractor shall provide to the Purchasing Agent a fully executed W-9 Form. It is the Contractor's responsibility to notify the Purchasing Agent of any changes in the remittal address. Failure to provide this information may impact payment of invoices by the City of San Diego. In order that this Form is the current Revision at time of submittal, the Contractor shall download this Form from the Internal Revenue Service website shown below, complete the Form and submit as specified herein. The website from which to obtain this Form is: <http://www.irs.ustreas.gov/pub/irs-pdf/fw9.pdf>.
5. The City shall pay the Contractor in arrears for services rendered. Billing shall be in accordance with the Price Schedule, allowing for City approved adjustments, if any. Invoices shall be submitted in duplicate with an original and copy clearly identified to the Contract Administrator or designee, at the address specified on the Purchase Order(s) (see Section I.01, "Definitions"). Invoices for non-financed items shall reference the Purchase Order number, include the date of services, description of the work performed by location and/or section or a listing of materials provided, and state the total invoice cost. Invoices for financed items shall include the date of services, description of the work performed by location and/or section or a listing of materials provided, and state the total invoice cost. Invoices for financed items will be paid on a monthly basis depending upon acceptance by the City of all goods and services completed by the Contractor within each month. For hardware invoices, acceptance will be defined as the City's confirmation of the receipt of the invoiced quantity of mobile units or other hardware items from the Contractor. Although the Contractor is required to submit an invoice detailing all goods, services and applicable taxes for a monthly billing period, the City of San Diego will be issuing two (2) separate payment checks or electronic wire transfers. One payment will be for the goods and services and the second payment will be for the applicable taxes.
6. If applicable, any extra-ordinary labor charges for services shall be included on the invoice along with a description of the extra-ordinary work to include the location/and or section work was performed. Contractor must attach written authorization from the Contract Administrator approving extraordinary work. Failure to do so will result in payment being withheld for such services. The extraordinary labor cost shall be as stated on the current Price Schedule.
7. If applicable, for parts delivered, invoices shall list the manufacturer of the part, manufacturer's published list price, percentage discount applied per the Contract's pricing agreement, and the net price to the City as well as item description, quantity, and extension.



**SECTION H**  
**SPECIAL CONTRACT REQUIREMENTS**  
**(RESERVED)**

## SECTION I

### GENERAL CONTRACT CLAUSES

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#### I.01 Definitions

**Addenda** – Additional terms or modifications to a Request for Proposal (RFP) after original RFP was issued.

**Announcement of the Selected Contractor** – A written announcement sent to all Contractors that submitted a proposal in response to this RFP (also known as the Intent to Award to an Apparent Successful Proposal or Contractor).

**Apparent Successful Proposal or Contractor** – The entity that submitted the Proposal best meeting the City's requirements and will be awarded the Contract, provided that all conditions precedent to Award are fulfilled.

**Award** – City's official acceptance of the Apparent Successful Proposer's Proposal after all conditions precedent to Award and required approvals are fulfilled.

**BAFO** – Best and Final Offer.

**Contract** – The agreement between the City and the Contractor which consists of the Contract Documents.

**Contract Administrator** - Contractor's point of contact for matters related to the provision of goods or services by Contractor pursuant to this Contract. The name(s) of the Contract Administrator(s) will be provided after Award. Same as Project Manager.

**Contract Documents** – The documents as defined in the "Contract Form."

**Contractor** – A supplier of goods and services. A reference to a supplier of product or service. Also known as Vendor, Proposer, Bidder, or Consultant. These names may be interchangeably used throughout the RFP.

**Debarment** – A prohibition against participation in City Contracts for reasons and grounds specified in the San Diego Municipal Code.

**Emergency** – Reasonably unforeseen circumstances as defined in the Municipal Code.

**Guarantee of Good Faith** – A guarantee in the form of a check, bond or deposit required from each Contractor to be used by the City in the event that an Apparent Successful Contractor fails to honor the terms of the Contract.

**Must** - Used throughout this RFP to indicate mandatory requirements. Same as “shall.”

**Notice to Proceed** – A written notification from the City to the successful bidder or Contractor stating that there is an award of contract in accordance with the a bid or proposal previously submitted, and that effective with receipt the contractor shall proceed with performance; allows work to start.

**Price Schedule** – Forms issued by the Purchasing Agent in Section B for Contractors to quote Contract Amount.

**Procurement Card** – City issued credit card.

**Proposal** – An offer to enter into a Contract with the City for goods or services for a specified amount as indicated in the Price Schedule contained in Section B, subject to the terms and conditions of the Contract Documents.

**Proposal Closing** – The date and time when all Proposals must be received by the Purchasing Agent in order to be considered for Award.

**Protest** – A complaint by an unsuccessful Contractor about a City action or decision related to the selection of the Apparent Successful Contractor prepared in compliance with the provisions of the San Diego Municipal Code.

**Purchase Order** – The Purchasing Agent’s form used to formalize a purchase transaction which is necessary prior to any services or goods being provided pursuant to the Contract.

**Purchasing Agent** – The person with authority under the San Diego Charter Section 35 and San Diego Municipal Code Section 22.3202, and as delegated by the Mayor to enter into, administer, and terminate City contracts, and make related determinations and findings.

**Solicitation or Request For Proposal** – Document inviting prospective Contractors to submit Proposals for goods or services.

**Specifications or Scope of Services** – A description of the physical and functional characteristics or the nature of a supply or service and the performance requirements as outlined in Section C.

**Suspension** – A prohibition against submitting Proposals on City projects for a temporary period of time as specified in the San Diego Municipal Code.

## I.02 Type of Contract

This is a firm fixed unit price contract with quantities to be determined based on need and funding.

**I.03 Term of Contract**

The term of this contract shall be the performance period as defined in the Contract Form and Section A, with dates to be memorialized in the Notice to Proceed.

**I.04 Notice to Proceed**

The Contractor shall not proceed with any performance of services or supply of goods required by this contract without a written Notice to Proceed from the City of San Diego. Any work performed or expenses incurred by the Contractor prior to the Contractor's receipt of Notice to Proceed shall be entirely at the Contractor's risk.

**I.05 Option to Extend Services/Term**

The City of San Diego may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as required by law (for example, pursuant to adjustments in prevailing wage, minimum wage or local living wage rates). The City will not grant an option, if the Contractor requests an increase which exceeds the average percentage variant for the previous twelve (12) months in the Consumer Price Index for All Urban Consumers (CPI-U) for the San Diego area as published by the Bureau of Labor Statistics, or 5.0%, whichever is less. If a price increase is requested, the Contractor must provide detailed supporting documentation to justify the requested increase. The requested increase will be evaluated by the City, and the City reserves the right to accept or reject such request. If any such adjustment results in a change in the contract price that change must be agreed to by the parties in writing pursuant to Section I.13, Changes. The option provision may be exercised more than once.

The Purchasing Agent may exercise the option by written notice to the Contractor sent prior to thirty (30) days before the expiration of the current term. The option to renew may not be declined by the Contractor.

If the City of San Diego exercises this option, the extended contract shall be considered to include this option clause.

The total duration of this contract, including the exercise of any options under this clause, shall not exceed five (5) years without approval of the City of San Diego Council by Ordinance pursuant to San Diego City Charter Section 99.

**I.06 Conflict of Interest**

The Contractor is subject to all federal, state and local conflict of interest laws, regulations and policies applicable to public contracts and procurement practices, including but not limited to California Government Code sections 1090, et. seq. and 81000, et. seq., the City of San Diego Ethics Ordinance, codified in the San

Diego Municipal Code at Section 27.3501 to 27.3595. The City may determine that a conflict of interest code requires the Contractor to complete one or more statements of economic interest disclosing relevant financial interests. Upon City's request, Contractor shall submit the necessary documents to the City.

The Contractor shall establish and make known to its employees and agents appropriate safeguards to prohibit employees from using their positions for a purpose that is, or that gives the appearance of being, motivated by the desire for private gain for themselves or others, particularly those with whom they have family, business or other relationships.

In connection with any task, Contractor shall not recommend or specify any product, supplier, or contractor with whom the Contractor has a direct or indirect financial or organizational interest or relationship that would violate conflict of interest laws, regulations, or policies.

If the Contractor violates any conflict of interest laws or any of these provisions in this Section, the violation shall be grounds for immediate termination of this Agreement. Further, the violation subjects the Contractor to liability to the City for all damages sustained as a result of the violation.

**I.07 Holidays:** The City of San Diego observes the following Holidays:

New Year's Day  
Martin Luther King, Jr. Day  
Presidents' Day  
Cesar Chavez Day  
Memorial Day  
Independence Day  
Labor Day  
Veterans' Day  
Thanksgiving Day  
Christmas Day

**I.08 Availability of Funds**

Multi-year Contracts are subject to annual appropriation of funds by the City Council. Purchase Orders are funded when issued, so are not subject to any subsequent appropriation of funds. All goods and services will be ordered by means of a Purchase Order or through a Procurement Card transaction.

In the event sufficient funds are not appropriated for the next fiscal year, the Contract may be terminated at the end of the current fiscal year. The City shall not be obligated to make further payments. In the event of termination or

reduction of services or quantity of goods, Contractor shall be compensated in accordance with auditable costs for services or products provided prior to notification of termination.

#### **I.09 Insurance**

Contractor shall not begin any work under Agreement until it has: (a) obtained, and upon the City's request provided to the City, insurance certificates reflecting evidence of all insurance required in below; however, the City reserves the right to request, and the Contractor shall submit, copies of any policy upon reasonable request by the City; (b) obtained City approval of each insurance company or companies; and (c) confirmed that all policies contain the specific provisions required below. Contractor's liabilities, including but not limited to Contractor's indemnity obligations, under this Agreement, shall not be deemed limited in any way to the insurance coverage required herein. Maintenance of specified insurance coverage is a material element of this Agreement and Contractor's failure to maintain or renew coverage or to provide evidence of renewal during the term of this Agreement may be treated as a material breach of contract by the City. The Contractor shall not modify any policy or endorsement thereto which increases the City's exposure to loss for the duration of this Agreement.

**9.1 Types of Insurance.** At all times during the term of this Agreement, the Contractor shall maintain insurance coverage as follows:

**Commercial General Liability (CGL).** Insurance written on an ISO Occurrence form CG 00 01 07 98 or an equivalent form providing coverage at least as broad which shall cover liability arising from any and all personal injury or property damage in the amount of \$1 million per occurrence and subject to an annual aggregate of \$2 million. There shall be no endorsement or modification of the CGL limiting the scope of coverage for either insured vs. insured claims or contractual liability. All defense costs shall be outside the limits of the policy.

**Commercial Automobile Liability.** For all of the Contractor's automobiles including owned, hired and non-owned automobiles, the Contractor shall keep in full force and effect, automobile insurance written on an ISO form CA 00 01 12 90 or a later version of this form or an equivalent form providing coverage at least as broad for bodily injury and property damage for a combined single limit of \$1 million per occurrence. Insurance certificate shall reflect coverage for any automobile (any auto).

**Workers' Compensation.** For all of the Contractor's employees who are subject to this Agreement and to the extent required by the applicable state or federal law, the Contractor shall keep in full force and effect, a Workers' Compensation policy. That policy shall provide a minimum of \$1 million of employers' liability coverage, and the Contractor shall provide an endorsement that the insurer waives the right of subrogation against the City and its respective elected officials, officers, employees, agents and representatives.

**9.2 Deductibles.** All deductibles on any policy shall be the responsibility of the Contractor and shall be disclosed to the City at the time the evidence of insurance is provided.

**9.3 Acceptability of Insurers.** Except for the State Compensation Insurance Fund, all insurance required by this Contract or in the Special General Conditions shall only be carried by insurance companies with a rating of at least "A-, VI" by A.M. Best Company, that are authorized by the California Insurance Commissioner to do business in the State of California, and that have been approved by the City.

The City will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State of California and is included on the List of Eligible Surplus Lines Insurers (LESLI list). All policies of insurance carried by non-admitted carriers are subject to all of the requirements for policies of insurance provided by admitted carriers described herein.

**9.4 Required Endorsements.** The following endorsements to the policies of insurance are required to be provided to the City before any work is initiated under this Agreement.

#### **Commercial General Liability Insurance Endorsements**

**ADDITIONAL INSURED.** To the fullest extent allowed by law including but not limited to California Insurance Code Section 11580.04, the policy or policies must be endorsed to include as an Insured the City of San Diego and its respective elected officials, officers, employees, agents and representatives with respect to liability arising out of (a) ongoing operations performed by you or on your behalf, (b) your products, (c) your work, including but not limited to your completed operations performed by you or on your behalf, or (d) premises owned, leased, controlled or used by you.

**PRIMARY AND NON-CONTRIBUTORY COVERAGE.** The policy or policies must be endorsed to provide that the insurance afforded by the Commercial General Liability policy or policies is primary to any insurance or self-insurance of the City of San Diego and its elected officials, officers, employees, agents and representatives as respects operations of the Named Insured. Any insurance maintained by the City of San Diego and its elected officials, officers, employees, agents and representatives shall be in excess of Contractor's insurance and shall not contribute to it.

**SEVERABILITY OF INTEREST.** The policy or policies must be endorsed to provide that the Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.

#### **Automobile Liability Insurance Endorsements**

**ADDITIONAL INSURED.** To the fullest extent allowed by law including but not limited to California Insurance Code Section 11580.04, the policy or policies must be endorsed to include as an Insured the City of San Diego and its respective elected officials, officers, employees, agents and representatives with respect to liability arising out of automobile owned, leased, hired or borrowed by or on behalf of the Contractor.

**SEVERABILITY OF INTEREST.** The policy or policies must be endorsed to provide that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability and shall provide cross-liability coverage.

### **Worker's Compensation Insurance Endorsements**

**WAIVER OF SUBROGATION.** The Worker's Compensation policy or policies must be endorsed to provide that the insurer will waive all rights of subrogation against the City and its respective elected officials, officers, employees, agents and representatives for losses paid under the terms of this policy or these policies which arise from work performed by the Named Insured for the City.

**9.5 Reservation of Rights.** The City reserves the right, from time to time, to review the Contractor's insurance coverage, limits, deductible, and self-insured retentions to determine if they are acceptable to the City. The City will reimburse the Contractor for the cost of the additional premium for any coverage requested by the City in excess of that required by this Agreement without overhead, profit, or any other markup.

**9.6 Additional Insurance.** The Contractor may obtain additional insurance not required by this Agreement.

**9.7 Excess Insurance.** All policies providing excess coverage to the City shall follow the form of the primary policy or policies including but not limited to all endorsements.

### **I.10 Criminal Background Screening**

The San Diego Police Department may conduct background investigations, of which the scope is determined by the San Diego Police Department, for any individual that may require access to Police facilities. Additionally, the San Diego Police Department may require background investigations, on all contractor employees, when information becomes available that indicates a potential breach in safety or security.

### **I.11 Governing Law**

The Contract and all Contract Documents shall be deemed to be made under, and shall be construed in accordance with and governed by the laws of the State of California without regard to the conflicts or choice of law provisions thereof.



### **I.12 Legal Requirements**

Federal, state, county and local laws, ordinance, rules and regulations that in any manner affect the goods or services covered herein apply. Lack of knowledge by the Contractor will in no way be a cause for relief from responsibility. Any acts or omissions of Contractor in violation of federal, state, or municipal law, City Charter, City Policies or regulations [regarding anti-competitive practices, unfair trade practices, collusion, gratuities, kickbacks, contingent fees, contemporaneous employment, or similar violations creating an unfair influence on the public solicitation and award process pertaining to this Contract] shall void this Contract. In addition to all other remedies or damages allowed by law, Contractor is liable to City for all damages arising out of the violation of any applicable law, including costs for substitute performance, and is subject to Suspension and Debarment.

### **I.13 Changes**

- a. The Purchasing Agent may, at any time, by written order and without notice to the sureties, make changes within the general scope of the contract in the services to be performed. If such changes cause an increase or decrease in the Contractor's cost of, or time required for, performance of any services under this contract, whether or not changed by any order, an equitable adjustment shall be made and the contract shall be modified in writing accordingly. Any claim of the Contractor for adjustment under this clause must be asserted in writing within thirty (30) days from the date of receipt by the Contractor of the notification of change unless the Purchasing Agent grants a further period of time before the date of final payment under the contract.
- b. No services for which an additional cost or fee will be charged by the Contractor shall be furnished without the prior written authorization of the Purchasing Agent.
- c. The Contract Documents fully express all understandings of the parties concerning the matters therein. No verbal understanding of the parties, their officers, agents, or employees shall be valid unless made in the form of a written change agreed to in writing.

### **I.14 Drug-Free Workplace**

The Contractor agrees to comply with the City's Drug-Free Workplace requirements set forth in Council Policy 100-17, adopted by San Diego Resolution R-277952 and incorporated into this Agreement by this reference.

### **I.15 Notices**

Notices under this Contract shall be in writing, shall reference the Contract Number, and shall be considered effective upon personal delivery to the

individuals listed below or five (5) calendar days after deposit in any U.S. mailbox, first class and addressed to the other party as follows:

- The City of San Diego:  
Purchasing Agent  
Purchasing & Contracting Department  
1200 Third Avenue, Suite 200  
San Diego CA 92101-4195

**I.16 Indemnification and Hold Harmless Agreement**

With respect to any liability, including but not limited to claims asserted for costs, losses, or payments for injury to any person or property caused or claimed to be caused by the acts or omissions of the Contractor, or the Contractor's employees, agents, and officers, arising out of performance involving this Contract, the Contractor agrees to defend, indemnify, protect, and hold harmless the City, its agents, officers, and employees from and against all liability. Also covered is liability arising from, connected with, caused by, or claimed to be caused by the active or passive negligent acts or omissions of the City, its agents, officers, or employees which may be in combination with the active or passive negligent acts or omissions of the Contractor, its employees, agents or officers, or any third party. The Contractor's duty to defend, indemnify, protect and hold harmless shall not include any claims or liabilities arising from the sole negligence or sole willful misconduct of the City, its agents, officers or employees.

**I.17 City of San Diego Restrictions**

In the event any City of San Diego restrictions may be imposed which would necessitate alteration of material, quality, workmanship or performance of the goods or services offered, it shall be the responsibility of the Contractor to immediately notify the City in writing specifying the regulation which requires alteration. The City of San Diego reserves the right to accept any such alteration, including any reasonable price adjustments occasioned thereby, or to cancel the contract at no expense to the City of San Diego.

**I.18 Assignment or Transfer**

The Contractor shall not assign or transfer any interest in the contract, in whole or part, without written approval of the Purchasing Agent. Claims for sums of money due, or to become due from the City of San Diego pursuant to the contract may be assigned to a bank, trust company or other financial institution. The City of San Diego is hereby expressly relieved and absolved of any and all liability in the event a purported assignment or subcontracting of the contract is attempted in the absence of the Contractor obtaining the Purchasing Agent's prior written approval.

Any assignment in violation of this paragraph shall constitute a default and is grounds for immediate termination of this Contract, at the sole discretion of the City. In no event shall any putative assignment create a contractual relationship between the City and any putative assignee.

**I.19 Availability of Records**

The Contractor shall retain and maintain all records and documents relating to City Contracts for five (5) years after receipt of final payment by the City, and shall make them available for inspection and audit by authorized representatives of the City, including the Purchasing Agent or designee.

The Contractor shall make available all requested data and records upon reasonable advance notice at locations within the City or County of San Diego, at any time during normal business hours, and as often as the City deems necessary. If records are not made available within the City or County of San Diego, the Contractor shall pay the City's travel costs to the location where the records are maintained. Failure to make requested records available for audit by the date requested may result in termination of the Contract.

Contractor must include this provision in all subcontracts.

**I.20 Standards of Conduct**

The Contractor shall be responsible for maintaining satisfactory standards of employees' competence, conduct, courtesy, appearance, honesty, and integrity. It shall be responsible for taking such disciplinary action with respect to any of its employees as may be necessary. The following actions may require discipline:

- a. Neglect of duty;
- b. Disorderly conduct, use of abusive or offensive language, quarreling, intimidation by words or actions or fighting;
- c. Theft, vandalism, immoral conduct or any other criminal action;

- d. Selling, consuming, possessing, or being under the influence of intoxicants, including alcohol, or illegal substances while on assignment at the City of San Diego; and
- e. Criminal convictions.

Contractor shall be responsible for working in harmony with all others involved with this Contract. Employees and agents of Contractor shall, while on the premises of the City, comply with all City rules and regulations.

**I.21 Removal of Employees**

The City of San Diego may request the Contractor immediately remove from assignment to the City of San Diego any employee found unfit to perform duties at the discretion of the City of San Diego and Contractor shall comply with all such requests.

**I.22 Supervision**

The Contractor shall provide adequate and competent supervision at all times during the performance of the contract. The Contractor or his designated representative shall be readily available to meet with the City of San Diego personnel. The Contractor shall provide the telephone numbers where its representative(s) can be reached.

**I.23 Performance Evaluation Meeting**

The Contractor shall be readily available to meet with representatives of the City of San Diego weekly during the first month of the contract and as often as necessary thereafter for the purpose of evaluating Contractor's performance on the Contract. A mutual effort will be made to resolve any and all performance problems identified at these meetings.

**I.24 Federal, State and Local Reporting Compliance**

The Contractor shall provide such financial and program information as required by the City of San Diego to comply with all Federal, State and local law reporting requirements.

**I.25 Nondiscrimination**

**25.1 Nondiscrimination in Employment.** The contractor shall comply with the City's Equal Opportunity Contracting Program. For applicable rules see: San Diego Municipal Code Chapter 2, Article 2, Division 27 (Section 22.2701 et. seq.), and <http://www.sandiego.gov/eoc/index.shtml>. The Contractor shall not discriminate against any employee or applicant for employment on any basis prohibited by law. The Contractor shall provide equal opportunity in all employment practices. The Contractor shall ensure that its Subcontractors comply with the City's Equal Opportunity Contracting Program Contractor Requirements. Nothing in this Section shall be interpreted to hold the Contractor liable for any discriminatory practice of its Subcontractors.

**25.2 Nondiscrimination in Contracting.** The Contractor shall not discriminate on the basis of race, gender, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring or treatment of Subcontractors, Contractors or suppliers. The Contractor shall provide equal opportunity for Subcontractors to participate in subcontracting opportunities. The Contractor understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment, and other sanctions. This language shall be in contracts between the Contractor and any Subcontractors, Contractors and suppliers.

**25.3 Contract Disclosure Requirements.** Upon the City's request, the Contractor agrees to provide to the City, within sixty (60) calendar days, a truthful and complete list of the names of all Subcontractors, Contractors, and suppliers that the Contractor has used in the past five (5) years on any of its contracts that were undertaken within San Diego County, including the total dollar amount paid by the Contractor for each subcontract or supply contract. The Contractor further agrees to fully cooperate in any investigation conducted by the City pursuant to the City's Nondiscrimination in Contracting Ordinance [San Diego Municipal Code sections 22.3501-22.3517]. The Contractor understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in remedies being ordered against the Contractor up to and including contract termination, debarment, and other sanctions.

**I.26 Project Personnel**

Except as formally approved by the City of San Diego, the key personnel identified in the Contractor's Proposal shall be the individuals who will actually complete the work, at the proposed levels of effort. Changes in staffing must be proposed in writing to the City of San Diego and approved.

**I.27 Photo Identification Badge**

The Contractor(s) shall provide any individual assigned to the City of San Diego, a company photo identification badge, which must be worn at all times while on

the City of San Diego property. The City of San Diego reserves the right to require the Contractor to pay fingerprinting fees for personnel assigned to work in sensitive areas. Upon completion of the service and prior to final payment of invoice, all employees shall turn in their photo identification badges to the Contractor.

#### **I.28 Lobbyist Activities**

Persons acting as lobbyists must state, at the beginning of their presentation, letter, telephone call, e-mail or facsimile transmission to any Purchasing Agent, Council Member of the City of San Diego, Mayor, members of Senior Management; the name of, the group, association, organization or business interest she/he is representing.

1. For purposes of The City of San Diego Policy, as currently enacted or as amended from time to time, a lobbyist is defined as a person who for immediate or subsequent compensation, (e.g., monetary profit/personal gain) represents a public or private group, association, organization or business interest and engages in efforts to influence the City of San Diego on matters within their official jurisdiction.
2. For purposes of this Policy, a lobbyist is not considered a public official acting in her/his official capacity.
3. Lobbyists shall annually disclose in each instance and for each client prior to any lobbying activities, their identity and activities.
4. The lobbyist must disclose any direct business association with any current elected or appointed official or employee or any immediate family member of a City of San Diego employee.

#### **I.29 Gratuities**

1. The Contract may be terminated by written notice if the Purchasing Agent determines that the Contractor, its agent, or another representative:
  - a. Offered or gave a gratuity (e.g. an entertainment or gift) to an officer, or employee of the City of San Diego; and
  - b. Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.
2. If this contract is terminated under the first paragraph above, The City of San Diego is entitled to pursue breach of contract remedies and all other remedies available at law.

### **I.30 Termination**

#### **1. Termination for Default**

The City may, by written notice of default to the Contractor, terminate the whole, or any part of, this Contract, provided that Contractor fails to cure such default within ten (10) days after receipt of such notice and assuming such default is capable of being cured. The following are considered defaults:

- a. Failure to make delivery of the goods or to perform the services of the required quality or within the time specified; or
- b. Failure to perform any of the obligations of this Contract, or to make sufficient progress in performance which may jeopardize full performance.

In the event the City terminates this Contract, in whole or in part, the City may procure, upon such terms and in such manner as the Purchasing Agent may deem appropriate, equivalent goods or services and the Contractor shall be liable to the City for any excess costs. The Contractor shall also continue performance to the extent not terminated.

#### **2. Termination for Convenience**

The Purchasing Agent, by written thirty (30) day notice, may terminate this Contract, in whole or in part, when it is in the best interest of the City. Contractor shall be compensated in accordance with auditable costs for services or products provided prior to notification of termination.

The Purchasing Agent may, by written notice to the Contractor, terminate this contract in whole or in part at any time as stated above. Upon receipt of such notice, the Contractor shall: (1) immediately discontinue all services affected (unless the notice directs otherwise), and (2) deliver to the Purchasing Agent all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Contractor in performing this contract, whether completed or in process.

- a. If the termination is for the convenience of the City of San Diego and if this is a fixed price contract, an equitable adjustment in the contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed services.
- b. If, after notice of termination for failure to fulfill contract obligations (default), it is determined that the Contractor had not so failed, the termination shall be deemed to have been effected for the convenience of the City of San Diego. In such event, adjustment in the contract price shall be made as provided in paragraph (a) of this clause.

- c. The rights and remedies of the City of San Diego provided in this clause are in addition to any other rights and remedies provided by law or under this contract. Time is of the essence for all delivery, performance, submittal, and completion dates in this contract.

### **I.31 Insolvency**

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Purchasing Agent responsible for administering the contract. This notification shall be furnished within five (5) days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of the City of San Diego contract numbers and contracting offices for all the City of San Diego contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

### **I.32 Dispute Resolution**

If a dispute arises out of or relates to this Contract and if said dispute cannot be settled through normal contract negotiations, the Contractor and the City must first endeavor to settle the dispute in an amicable manner, using mandatory non-binding mediation under the rules of the American Arbitration Association or any other neutral organization agreed upon before having recourse in a court of law.

1. Selection of Mediator. A single mediator that is acceptable to both parties shall be used to mediate the claim. The mediator will be knowledgeable in the subject matter of this Contract, if possible, and chosen from lists furnished by the American Arbitration Association or any other agreed upon mediator.
2. Expenses. The expenses of witnesses for either side shall be paid by the party producing such witnesses. All other expenses of the mediation, including required traveling and other expenses of the mediator, and the cost of any proofs or expert advice produced at the direct request of the mediator, shall be borne equally by the parties, unless they agree otherwise.
3. Conduct of Mediation Sessions. Mediation hearings will be conducted in an informal manner and discovery will not be allowed. The discussions, statements, writings and admissions will be confidential to the proceedings (pursuant to California Evidence Code Sections 1115 through 1128) and will not be used for any other purpose unless otherwise agreed by the parties in writing. The parties may agree to exchange any information they deem necessary. Both parties shall have a representative attend the mediation who is authorized to settle the dispute, though the City's recommendation of



settlement may be subject to the approval of the Mayor and City Council. Either party may have attorneys, witnesses or experts present.

4. Mediation Results. Any resultant agreements from mediation shall be documented in writing. The results of the mediation shall not be final or binding unless otherwise agreed to in writing by the parties. Mediators shall not be subject to any subpoena or liability and their actions shall not be subject to discovery.

### **I.33 Patents and Royalties**

Unless otherwise specified, the Contractor shall pay all royalties, license and patent fees. In submitting a Proposal, the Contractor warrants that the materials to be supplied do not infringe upon any patent, trademark or copyright and further agrees to defend any and all suits, actions and claims for infringement that are brought against the City, whether general, exemplary or punitive, as a result of any actual or claimed infringement asserted against the City, the Contractor or those furnishing material to the Contractor pursuant to this Contract. The Contractor, without exception, shall defend, indemnify and hold harmless The City of San Diego and its employees from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by The City of San Diego. If the Contractor uses any design, device, or materials covered by letters, patent, or copyright, it is mutually understood and agreed without exception that the contract prices shall include all royalties or cost arising from the use of such design, device or materials in any way involved in the work.

### **I.34 Warranty of Services**

1. "Acceptance," as used in this clause, means the act of an authorized representative of the City of San Diego by which the City of San Diego assumes for itself, or as an agent of another, ownership of existing and identified supplies, or approves specific services, as partial or complete performance of the contract. "Correction," as used in this clause, means the elimination of defect.
2. Notwithstanding inspection and acceptance by the City of San Diego or any provision concerning the conclusiveness thereof, the Contractor warrants that all services performed under this contract will, at the time of acceptance, be free from defects in workmanship and conform to the requirements of this contract. The Purchasing Agent shall give written notice of any defect or nonconformance to the Contractor within twenty-four (24) hours. This notice shall state either (1) that the Contractor shall correct or re-perform any defective or nonconforming services, or (2) that the City of San Diego does not require correction or re-performance.

3. If the Contractor is required to correct or re-perform, it shall be at no cost to the City of San Diego, and any services corrected or re-performed by the Contractor shall be subject to this clause to the same extent as work initially performed. If the Contractor fails or refuses to correct or re-perform, the Purchasing Agent may, by contract or otherwise, correct or replace with similar services and charge to the Contractor the cost occasioned to the City of San Diego thereby, or make an equitable adjustment in the contract price.
4. All goods and services provided under the Contract shall be warranted by Contractor and/or manufacturer for at least twelve (12) months after Acceptance by City, except automotive equipment, which will be warranted for a minimum of 12,000 miles or 12 months, whichever occurs first, unless stated differently in the Contract Documents.
5. Contractor shall be responsible to the City for all warranty service, parts and labor. Contractor is responsible for ensuring that warranty work is performed at a facility acceptable to City and that services, parts and labor are available and provided to meet City's schedules and deadlines. Contractor may establish a warranty service contract with an agency satisfactory to City instead of performing the warranty service itself.

#### **I.35 Licenses and Permits**

The Contractor shall, without additional expense to the City of San Diego, be responsible for obtaining any necessary licenses, permits, certifications, accreditations, fees and approvals for complying with any federal, state, county, municipal, and other laws, codes, and regulations applicable to the performance of the work or to the products or services to be provided under this contract including, but not limited to, any laws or regulations requiring the use of licensed Contractors to perform parts of the work.

#### **I.36 Taxes**

The City will furnish Exemption Certificates for Federal Excise Tax. The City is liable for State, City, and County Sales Taxes. Do not include this tax in the Amount proposed; it will be added to the net amount invoiced. All or any portion of the City Sales Tax returned to the City will be considered in the evaluation of Proposals.

I.R.S. regulations require the City to have the correct name, address, and Taxpayer Identification Number (TIN) or Social Security Number (SSN) on file for businesses or persons who provide services or products to the City. This information is necessary to complete Form 1099 at the end of each tax year.

In order to comply with I.R.S. regulations, the City requires each Contractor to provide a Form W-9 prior to Award of Contract. Failure to provide a completed Form W-9 within ten (10) business days of the City's request may result in a Proposal being declared non-responsive and rejected.

**I.37 Protection of the City of San Diego Property**

The Contractor shall use reasonable care to avoid damaging existing buildings, equipment, and vegetation on or about premises owned by, or under the control of, the City of San Diego. If the Contractor's failure to use reasonable care causes damage to any of this property, the Contractor shall replace or repair the damage at no expense to the City of San Diego as the Purchasing Agent directs. If the Contractor fails or refuses to make such repair or replacement, the Contractor shall be liable for the cost, which may be deducted from the contract price.

**I.38 Publicity Releases**

All publicity releases or releases of reports, papers, articles, maps, or other documents in any way concerning this contract or the work, hereunder, which the Contractor or any of its subcontractors desires to make for purposes of publication in whole or in part, shall be subject to approval by the Purchasing Agent prior to release.

**I.39 Suspension of Work**

The Purchasing Agent may order the Contractor in writing to suspend all or any part of the work for such period of time as he or she may determine to be appropriate for the convenience of the City of San Diego. In the case of delay caused by the City, the Contractor may be entitled to an adjustment. However, no part of any claim based on the provisions of this clause shall be allowed if not supported by adequate evidence showing that the cost would not have been incurred but for a delay within the provisions of this clause.

**I.40 Standards of Performance**

The Contractor shall perform all services required by this contract in accordance with high professional standards prevailing in the Contractor's field of work.

Unless otherwise required in the Scope of Services/Work, all goods furnished shall be new and the best of their kind.

Any reference to a specific brand name is illustrative only and describes a component best meeting the specific operational, design, performance, maintenance, quality or reliability standards and requirements of the City, thereby incorporating these requirements by reference within the Specification. An equivalent ("or equal") may be offered by the Contractor in response to a brand name reference (Proposed Equivalent). The City may consider the Proposed Equivalent after it is subjected to testing and evaluation which must be completed prior to Award of the Contract. If the Contractor offers an item of a manufacturer or Contractor other than that specified, Contractor must identify maker, brand, quality, manufacturer number, product number, catalog number, or other trade designation.

The City has sole discretion in determining whether a Proposed Equivalent will satisfy its requirements. It is the Contractor's responsibility to provide, at its expense, any product information, test data or other information or documents the City requests in order to properly evaluate or demonstrate the acceptability of the Proposed Equivalent, including independent testing or evaluation at qualified test facilities or destructive testing.

If the item in the Specifications has a trade name, brand, catalog, manufacturer, and/or product number, Contractor shall state the applicable trade name, brand, catalog, manufacturer, and/or product number in the Proposal.

Services performed and goods provided, must be acceptable to the City, in strict conformity with all instructions, conditions, and terms of the Contract Documents and performed in accordance with the standards customarily adhered to by an experienced and competent professional using the degree of care and skill ordinarily exercised by reputable professionals practicing in the same field of service in the State of California. Where approval by the City, the City Mayor, or other representatives of the City is required, it is understood to be general approval only and does not relieve the Contractor of responsibility for complying with all applicable laws, codes, and good business practices.

**I.41 Notice of Labor Disputes**

- a. If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor immediately shall give notice, including all relevant information, to the Purchasing Agent.
- a. The Contractor agrees to insert the substance of this clause, including this paragraph, in any subcontract under which a labor dispute may delay the timely performance of this contract; except that each subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify the next higher tier subcontractor or the Contractor, as the case may be, of all relevant information concerning the dispute.

**I.42 Pending Legal Dispute**

If the Contractor is currently involved in litigation with the City or any of the Agencies identified in this RFP, the Contractor must identify the title of the litigation, the Court(s) where the litigation is pending, and the case number(s), along with a brief description(s) of the nature of the dispute(s).

**I.43 Time of Essence**

Time is of the essence for each provision of the Contract Documents, unless specified otherwise.

**I.44 Americans with Disabilities Act Certification**

The Contractor hereby certifies that it agrees to comply with the City's Americans With Disabilities Act Compliance/City Contracts requirements set forth in Council Policy 100-04, adopted by San Diego Resolution R-282153 and incorporated into this Agreement by this reference.

**I.45 Debarment Proceedings**

Contractor misconduct may be punishable by suspension or debarment in accordance with San Diego Municipal Code Sections 22.0800, *et seq.*

**I.46 Other Public Agencies**

Public agencies other than the City of San Diego, as defined by Cal. Gov. Code § 6500 may choose to use this Contract, subject to the Contractor's acceptance. The City is not liable or responsible for any obligations related to a subsequent agreement between the Contractor and another public agency. If agreements are entered into by other agencies and the Contractor, Contractor shall furnish the City with an annual report showing the name of the agencies, contact person and phone number for each agency, and details of goods or services provided, including quantities. This report shall be furnished to the City upon request.

**I.47 Product Endorsements**

Contractor is prohibited from indicating, either directly or by implication, that the City has endorsed its goods or services without prior written authorization by the City.

**I.48 Procurement Card Transactions**

DELETED.

**I.49 Severability**

The unenforceability, invalidity, or illegality of any provision of the Contract Documents shall not render any other provision unenforceable, invalid, or illegal.

**I.50 No Waiver**

No failure of either the City or the Contractor to insist upon the strict performance by the other of any covenant, term or condition of this Agreement, nor any failure to exercise any right or remedy consequent upon a breach of any covenant, term, or condition of this Agreement, shall constitute a waiver of any such breach of such covenant, term or condition. No waiver of any breach shall affect or alter this Agreement, and each and every covenant, condition, and term hereof shall continue in full force and effect to any existing or subsequent breach.

**I.51 Covenants and Conditions**

All provisions in the Contract expressed as either covenants or conditions on the part of the City or Contractor, shall be deemed to be both covenants and conditions.

**I.52 Headings**

All article headings are for convenience only and shall not affect the interpretation of these Contract Documents.

**I.53 Independent Contractors**

The Contractor and any subcontractors employed by the Contractor shall be independent contractors and not agents of the City. Any provisions in the Contract that may appear to give the City any right to direct the Contractor concerning the details of performance, or to exercise any control over such performance, shall mean only that the Contractor shall follow the direction of the City concerning the end results of the performance.

**I.54 Successors in Interest**

This Contract and all rights and obligations created by this Contract shall be in force and effect whether or not any parties to the Contract have been succeeded by another entity, and all rights and obligations created by this Contract shall be vested and binding on any party's successor in interest.

**I.55 Software Licensing**

Contractor represents and warrants that the software, as delivered to the City, does not contain any program code, virus, worm, trap door, back door, timer, or clock that would erase data or programming or otherwise cause the software to become inoperable, inaccessible, or incapable of being used in accordance with its user manuals, either automatically, upon the occurrence of Licensor-selected conditions, or manually on the command of.

**I.56 Intellectual Property**

**56.1 Work For Hire.** All original designs, plans, specifications, reports, documentation, and other informational materials, whether written or readable by machine, originated or prepared exclusively for the City pursuant to this Agreement (Deliverable Materials) is "work for hire" under the United States Copyright law and shall become the sole property of the City. The Contractor, including its employees, and independent Subcontractor(s), shall not assert any common law or statutory patent, copyright, trademark, or any other intellectual proprietary right to the City to the deliverable Materials.

**56.2. Rights in Data.** All rights (including, but not limited to publication(s), registration of copyright(s), and trademark(s)) in the Deliverable Materials, developed by the Contractor, including its employees, agents, talent and independent Subcontractors pursuant to this Agreement are the sole property of the City. The Contractor, including its employees, agents, talent, and independent Subcontractor(s), may not use any such Product mentioned in this article for purposes unrelated to Contractor's work on behalf of the City without prior written consent of the City.

**56.3 Intellectual Property Rights Assignment.** Contractor, its employees, agents, talent, and independent Subcontractor(s) agree to promptly execute and deliver, upon request by City or any of its successors or assigns at any time and without further compensation of any kind, any power of attorney, assignment, application for copyright, patent, trademark or other intellectual property right protection, or other papers or instruments which may be necessary or desirable to fully secure, perfect or otherwise protect to or for the City, its successors and assigns, all right, title and interest in and to the content of the Deliverable Materials; and cooperate and assist in the prosecution of any action or opposition proceeding involving said rights and any adjudication of the same.

**56.4 Moral Rights.** Contractor, its employees, agents, talent, and independent Subcontractor(s) hereby irrevocably and forever waives, and agrees never to assert, any Moral Rights in or to the Deliverable Materials which Contractor, its employees, agents, talent, and independent Subcontractor(s), may now have or which may accrue to Contractor, its employees, agents, talent, and independent Subcontractor(s)' benefit under U.S. or foreign copyright laws and any and all other residual rights and benefits which arise under any other applicable law now in force or hereafter enacted. The term "Moral Rights" shall mean any and all rights of paternity or integrity of the content and the right to object to any modification, translation or use of said content, and any similar rights existing under judicial or statutory law of any country in the world or under any treaty, regardless of whether or not such right is denominated or referred to as a moral right.

**56.5 Subcontracting.** In the event that Contractor utilizes a Subcontractor(s) for any portion of the Work that is in whole or in part of the specified Deliverable(s) to the City, the agreement between Contractor and the Subcontractor [Subcontractor Agreement] shall include a statement that identifies that the Deliverable/Work product as a "work-for hire" as defined in the Act and that all intellectual property rights in the Deliverable/Work product, whether arising in copyright, trademark, service mark or other belongs to and shall vest solely with the City. Further, the Subcontractor Agreement shall require that the Subcontractor, if necessary, shall grant, transfer, sell and assign, free of charge, exclusively to the City, all titles, rights and interests in and to said Work/Deliverable, including all copyrights and other intellectual property rights. City shall have the right to review any Subcontractor agreement for compliance with this provision.

**56.6 Publication.** Contractor may not publish or reproduce any Deliverable Materials, for purposes unrelated to Contractor's work on behalf of the City without prior written consent of the City.

**56.7 Intellectual Property Warranty and Indemnification.** Contractor represents and warrants that any materials or deliverables, including all Deliverable Materials, provided under this contract are either original, not encumbered and do not infringe upon the copyright, trademark, patent or other intellectual property rights of any third party, or are in the public domain. If Deliverable Materials provided hereunder become the subject of a claim, suit or allegation of copyright, trademark or patent infringement, City shall have the right, in its sole discretion, to require Contractor to produce, at Contractor's own expense, new non-infringing materials, deliverables or Works as a means of remedying any claim of infringement in addition to any other remedy available to the City under law or equity. Contractor further agrees to indemnify and hold harmless the City, its officers, employees and agents from and against any and all claims, actions, costs, judgments or damages of any type alleging or threatening that any materials, deliverables, supplies, equipment, services or Works provided under this contract infringe the copyright, trademark, patent or other intellectual property or proprietary rights of any third party (Third Party Claims of Infringement). If a Third Party Claim of Infringement is threatened or made before Contractor receives payment under this contract, City shall be entitled, upon written notice to Contractor, to withhold some or all of such payment.

**I.57 Confidentiality of Services**

All services performed by Contractor, and any subcontractors if applicable including but not limited to all drafts, data, information, correspondence, proposals, reports or any nature, estimates compiled or composed by the Contractor, are for the sole use of the City, its agents and employees. Neither the documents nor their contents shall be released to any third party without the prior written consent of the City. This provision does not apply to information that (a) was publicly known, or otherwise known to the Contractor, at the time that it was disclosed to the Contractor by the City, (b) subsequently becomes publicly known through no act or omission of the Contractor, or (c) otherwise becomes known to the Contractor other than through disclosure by the City.

**I.58 Business Tax License**

Any company doing business with the City of San Diego is required to comply with Section 31.0301 of the San Diego Municipal Code regarding Business Tax. For more information please visit the City of San Diego website at [www.sandiego.gov/treasurer/](http://www.sandiego.gov/treasurer/) or call (619) 615-1500. The City requires that each Contractor provide a copy of their Business Tax License, or a copy of their application receipt. Failure to provide the required documents within ten (10) business days of the City's request may result in a Bid being declared non-responsive and rejected.

**I.59 Performance and Payment Bond**



**PARAGRAPH DELETED**

**Prior to contract execution**, the Apparent Successful Contractor **shall** furnish the City with a **Performance Bond (Surety Bond)** conditioned upon the faithful performance of the Contract. This may take the form of a bond executed by a surety company authorized to do business in the State of California and approved by the City, an endorsed Certificate of Deposit, or a money order or a certified check drawn on a solvent bank. The bond shall be in a sum equal to one hundred percent (100%) of the Amount of the Contract. The City may file a claim against such bond or deposit in the event the Contractor fails or refuses to fulfill all terms and conditions of the Contract.

**I.60 Compliance with Controlling Law**

The Contractor shall comply with all laws, ordinances, regulations, and policies of the federal, state, and local governments applicable to this Agreement. In addition, the Contractor shall comply immediately with all directives issued by the City or its authorized representatives under authority of any laws, statutes, ordinances, rules, or regulations.

**I.61 Equal Benefits**

Effective January 1, 2011, any contract awarded from this solicitation is subject to the City of San Diego's Equal Benefits Ordinance [EBO], Chapter 2, Article 2, Division 43 of the San Diego Municipal Code [SDMC].

In accordance with the EBO, contractors must certify they will provide and maintain equal benefits as defined in SDMC §22.4302 for the duration of the contract [SDMC §22.4304(f)]. Failure to maintain equal benefits is a material breach of the contract [SDMC §22.4304(e)]. Contractors must notify employees of their equal benefits policy at the time of hire and during open enrollment periods and must post a copy of the following statement in an area frequented by employees:

During the performance of a contract with the City of San Diego, this employer will provide equal benefits to its employees with spouses and its employees with domestic partners.

Contractors also must give the City access to documents and records sufficient for the City to verify the contractors are providing equal benefits and otherwise complying with EBO requirements.

Full text of the EBO and the Rules Implementing the Equal Benefits Ordinance are posted on the City's website at [www.sandiego.gov/purchasing/](http://www.sandiego.gov/purchasing/) or can be requested from the Equal Benefits Program at (619) 533-3948.

**I.62 Contractor Standards**

This Contract is subject to the Contractor Standards clause of the Municipal Code, Chapter 2, Article 2, Division 32 adopted by Ordinance No. O-19383. All Contractors are required to complete the Contractor Standards Pledge of Compliance included in this RFP (refer to Section K).

**I.63 Living Wage**

Any contract awarded from this solicitation is subject to the City of San Diego's Living Wage Ordinance [LWO], Chapter 2, Article 2, Division 42 of the San Diego Municipal Code [SDMC]. Provisions of the LWO include requirements for contractors and subcontractors to pay specified rates and provide compensated and uncompensated days off for covered employees. Full text of the LWO and Rules Implementing the Living Wage Ordinance is posted on the City's website at [www.sandiego.gov/purchasing/](http://www.sandiego.gov/purchasing/) or can be requested from the Living Wage Program at (619) 236-6682.

LWO wage and health benefit rates are adjusted annually in accordance with SDMC §22.4220(b) to reflect the Consumer Price Index. Any contract awarded from this solicitation must include this upward adjustment of pay rates to covered employees on July 1 of each year.

## **SECTION J**

### **LIST OF ATTACHMENTS, EXHIBITS, OR APPENDICES**

- Attachment 1 - Equal Opportunity Contracting Program (EOCP)  
Proposer Requirements
- Attachment 2 - City of San Diego Administrative Regulations No. 90.64
- Attachment 3 - City of San Diego Mobile Devices and Network Diagrams

ATTACHMENT 1

EQUAL OPPORTUNITY CONTRACTING PROGRAM (EOCP)

GOODS OR SERVICES CONTRACTOR REQUIREMENTS

- I. **City's Equal Opportunity Commitment.** The City of San Diego (City) is strongly committed to equal opportunity for employees and Subcontractors of Contractors doing business with the City. The City encourages its Contractors to share this commitment. Contractors are encouraged to take positive steps to diversify and expand their Subcontractor solicitation base and to offer consulting opportunities to all eligible Subcontractors.
- II. **Nondiscrimination in Contracting Ordinance.** All Contractors doing business with the City, and their Subcontractors, must comply with requirements of the City's *Nondiscrimination in Contracting Ordinance*, San Diego Municipal Code Sections 22.3501 through 22.3517.
  - A. Bid or Proposal Documents to include Disclosure of Discrimination Complaints. As part of its bid or proposal, Contractor shall provide to the City a list of all instances within the past ten (10) years where a complaint was filed or pending against Contractor in a legal or administrative proceeding alleging that Contractor discriminated against its employees, Subcontractors, vendors, or suppliers, and a description of the status or resolution of that complaint, including any remedial action taken.
  - B. Nondiscrimination in Contracting. The following language shall be included in contracts for City projects between the Contractor and any Subcontractors, vendors, and suppliers:

Contractor shall not discriminate on the basis of race, gender, religion, national origin, ethnicity, sexual orientation, age, or disability in the solicitation, selection, hiring, or treatment of subcontractors, vendors, or suppliers. Contractor shall provide equal opportunity for Subcontractors to participate in opportunities. Contractor understands and agrees that violation of this clause shall be considered a material breach of the contract and may result in contract termination, debarment, or other sanctions.
  - C. Contract Disclosure Requirements. Upon the City's request, Contractor agrees to provide to the City, within sixty (60) calendar days, a truthful and complete list of the names of all Subcontractors, vendors, and suppliers that Contractor has used in the past five (5) years on any of its contracts that were undertaken within County of San Diego, including the total dollar amount paid by Contractor for each subcontract or supply contract. Contractor further agrees to fully cooperate in any investigation conducted by the City pursuant to the City's Nondiscrimination in Contracting Ordinance, Municipal Code Sections 22.3501 through 22.3517. Contractor understands and agrees that violation of this clause shall be considered a material

breach of the contract and may result in remedies being ordered against the Contractor up to and including contract termination, debarment and other sanctions.

**III. Equal Employment Opportunity Outreach Program.** Contractors shall comply with requirements of San Diego Municipal Code Sections 22.2701 through 22.2707. Contractors shall submit with their bid or proposal a *Work Force Report* for approval by the Program Manager of the City of San Diego Equal Opportunity Contracting Program (EOCP).

- A. Nondiscrimination in Employment. Contractor shall not discriminate against any employee or applicant for employment on any basis prohibited by law. Contractor shall provide equal opportunity in all employment practices. Contractors shall ensure that their subcontractors comply with this program. Nothing in this Section shall be interpreted to hold a Contractor liable for any discriminatory practice of its subcontractors.
- B. Work Force Report. If based on a review of the *Work Force Report* (Attachment AA) submitted an EOCP staff Work Force Analysis determines there are under representations when compared to County Labor Force Availability data, then the Contractor will also be required to submit an *Equal Employment Opportunity (EEO) Plan* to the Program Manager of the City of San Diego Equal Opportunity Contracting Program (EOCP) for approval
- C. Equal Employment Opportunity Plan. If an *Equal Employment Opportunity Plan* is required, the Program Manager of EOCP will provide a list of plan requirements to Contractor.

**IV. Small and Local Business Program Requirements.** The City has adopted a Small and Local Business Enterprise (SLBE) program for Goods or services contracts. SLBE program requirements for goods or services contracts are set forth Council Policy 100-10.

A. SLBE and ELBE Participation for Contracts Valued Over \$50,000:

- 1. The City shall apply a bid discount in the way of:
  - a. 2% discount off the bid price for SLBE or ELBE prime contractors; or
  - b. 2% discount off the bid price for prime contractors achieving the voluntary goal of 20% for SLBE or ELBE subcontractor participation set forth in subsection 2 below.

The discount will not apply if an award to the discounted bidder would result in a total contract cost of \$10,000 in excess of the low, non-discounted bid. In the event of a tie between a discounted bidder and non-discounted bidder, the discounted bidder will be awarded the contract.

2. All goods or services contracts valued over \$50,000 or more have a voluntary SLBE/ELBE goal of 20%. For the purposes of this Council Policy, the subcontractor requirement may be met by a provider of materials or supplies. Details can be found at <http://www.sandiego.gov/eoc/boc/slbe.shtml>.

B. Subcontractor Participation List. The *Subcontractor Participation List* (Attachment BB) shall indicate the Name and Address, Scope of Work, Percent of Total Proposed Contract Amount, Certification Status and Where Certified for each proposed Subcontractor/Subcontractor.

C. Commitment Letters. Contractor shall also submit Subcontractor *Commitment Letters* on Subcontractor's letterhead, no more than one page each, from all proposed Subcontractors to acknowledge their commitment to the team, scope of work, and percent of participation in the project.

D. Contract Activity Reports. To permit monitoring of the winning Contractor's commitment to achieving compliance, *Contract Activity Reports* (Attachment CC) reflecting work performed by Subcontractors/Vendors shall be submitted quarterly for any work covered under an executed contract.

**V. Demonstrated Commitment to Equal Opportunity.** The City seeks to foster a business climate of inclusion and to eliminate barriers to inclusion.

A. Contractors are required to submit the following information with their bid or proposal:

1. Outreach Efforts. Description of Contractor's outreach efforts undertaken on this project to make subcontracting opportunities available to all interested and qualified firms including SLBE/ELBE/DBE/MBE/WBE/DVBE/OBE.
2. Past Participation Levels. Listing of Contractor's Subcontractor participation levels achieved on all private and public projects within the past three (3) years. Include name of project, type of project, value of project, Subcontractor firm's name, percentage of Subcontractor firm's participation, and identification of Subcontractor firm's ownership as a certified Small or Emerging Local Business Enterprise, Woman Business Enterprise, Disadvantaged Business Enterprise, Disabled Veteran Business Enterprise, or Other Business Enterprise.
3. Equal Opportunity Employment. Listing of Contractor's strategies to recruit, hire, train and promote a diverse workforce. These efforts will be considered in conjunction with Contractor's *Workforce Report* as compared to the County's Labor Force Availability.
4. Community Activities. Listing of Contractor's current community activities such as membership and participation in local organizations, associations, scholarship programs, mentoring, apprenticeships, internships, community projects, charitable contributions and similar endeavors.

- B. In accordance with the City's Equal Opportunity Commitment, the City will consider the four factors described above as part of the RFB or RFP evaluation process. These factors will be evaluated on a pass or fail basis.

## **VI. Definitions.**

Certified **"Minority Business Enterprise" (MBE)** means a business which is at least fifty-one percent (51%) owned by African Americans, American Indians, Asians, Filipinos, and/or Latinos and whose management and daily operation is controlled by one or more members of the identified ethnic groups. In the case of a publicly-owned business, at least fifty-one percent (51%) of the stock must be owned by, and the business operated by, one or more members of the identified ethnic groups.

Certified **"Women Business Enterprise" (WBE)** means a business which is at least fifty-one percent (51%) owned by one or more women and whose management and daily operation is controlled by the qualifying party(s). In the case of a publicly-owned business, at least fifty-one percent (51%) of the stock must be owned by, and the business operated by, one or more women.

Certified **"Disadvantaged Business Enterprise" (DBE)** means a business which is at least fifty-one percent (51%) owned and operated by one or more socially and economically disadvantaged individuals and whose management and daily operation is controlled by the qualifying party(s). In the case of a publicly-owned business, at least fifty-one percent (51%) of the stock must be owned by, and the business operated by, socially and economically disadvantaged individuals.

Certified **"Disabled Veteran Business Enterprise" (DVBE)** means a business which is at least fifty-one percent (51%) owned by one or more veterans with a service related disability and whose management and daily operation is controlled by the qualifying party(s).

**"Other Business Enterprise" (OBE)** means any business which does not otherwise qualify as Minority, Woman, Disadvantaged or Disabled Veteran Business Enterprise.

**Emerging Local Business Enterprise (ELBE)** – Any for-profit enterprise that is not a broker, that is independently owned and operated; that is not a subsidiary of another business; that meets the definition of a local business; and that is not dominant in its field of operation whose average gross annual receipts in the prior three fiscal years do not exceed:

1. \$2.75 million – Construction
2. \$1.5 million – Specialty Construction
3. \$1.5 million – Goods/Materials/Services
4. 1.0 million – Trucking
5. \$750,000 – Professional Services and Architect/Engineering

If a business has not existed for 3 years, the gross sales limits described above shall be applied based upon the annual averages over the course of the existence of the business.

**Local Business Enterprise (LBE)** – A firm having a Principal Place of Business and a Significant Employment Presence in San Diego City or County, California that has been in operation for 12 consecutive months and a valid business tax certificate. This definition is subsumed within the definition of Small Local Business Enterprise.

**Small Local Business Enterprise (SLBE)** – Any for-profit enterprise that is not a broker, that is independently owned and operated; that is not a subsidiary of another business; that meets definition of a local business; and that is not dominant in its field of operation whose average gross annual receipts in the prior three fiscal years do not exceed:

- \$5.0 million – Construction
- \$3.0 million – Specialty Construction
- \$3.0 million – Goods/Materials/Services
- \$2.0 million – Trucking
- \$1.5 million – Professional Services and Architect/Engineering

California State certified Micro and Disabled Veteran Owned business enterprises shall also satisfy the requirements to be defined as a Small Business Enterprise.

If a business has not existed for 3 years, the employment and gross sales limits described above shall be applied based upon the annual averages over the course of the existence of the business.

#### **VIII. Certification.**

Below are the EOC – accepted certification agencies along with certifiable groups:

City of San Diego:	ELBE, SLBE
Caltrans:	DBE, SMBE, SWBE
Dept. of General Services:	DVBE
CA Public Utilities Commission:	MBE, WBE
City of Los Angeles:	DBE, WBE, MBE
SD Regional Minority Supplier Diversity Council:	MBE, WBE

#### **IX. List of Attachments.**

- AA. Work Force Report
- BB. Subcontractors List
- CC. Contract Activity Report





City of San Diego.

**EQUAL OPPORTUNITY CONTRACTING (EOC)**

1010 Second Avenue • Suite 500 • San Diego, CA 92101

Phone: (619) 533-4464 • Fax: (619) 533-4474

**ATTACHMENT AA - WORK FORCE REPORT****ADMINISTRATIVE**

The objective of the *Equal Employment Opportunity Outreach Program*, San Diego Municipal Code Sections 22.3501 through 22.3517, is to ensure that contractors doing business with the City, or receiving funds from the City, do not engage in unlawful discriminatory employment practices prohibited by State and Federal law. Such employment practices include, but are not limited to unlawful discrimination in the following: employment, promotion or upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay or other forms of compensation, and selection for training, including apprenticeship. Contractors are required to provide a completed *Work Force Report (WFR)*.

**CONTRACTOR IDENTIFICATION**

Type of Contractor: ☐ Construction ☒ Vendor/Supplier ☐ Financial Institution ☐ Lessee/Lessor  
☐ Consultant ☐ Grant Recipient ☐ Insurance Company ☐ Other

Name of Company: Radio Satellite Integrators, Inc

AKA/DBA: \_\_\_\_\_

Address (Corporate Headquarters, where applicable): 19144 Van Ness Ave

City Torrance County Los Angeles State CA Zip 90501

Telephone Number: (310) 787-7700 FAX Number: (310) 787-7435

Name of Company CEO: Jonathan Michels

Address(es), phone and fax number(s) of company facilities located in San Diego County (if different from above):

Address: \_\_\_\_\_

City \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Telephone Number: ( ) \_\_\_\_\_ FAX Number: ( ) \_\_\_\_\_

Type of Business: \_\_\_\_\_ Type of License: \_\_\_\_\_

The Company has appointed: \_\_\_\_\_

as its Equal Employment Opportunity Officer (EEOO). The EEOO has been given authority to establish, disseminate, and enforce equal employment and affirmative action policies of this company. The EEOO may be contacted at:

Address: \_\_\_\_\_

Telephone Number: ( ) \_\_\_\_\_ FAX Number: ( ) \_\_\_\_\_

- ☒ One San Diego County (or Most Local County) Work Force - Mandatory
- ☐ Branch Work Force \*
- ☐ Managing Office Work Force

Check the box above that applies to this WFR.

\*Submit a separate Work Force Report for all participating branches. Combine WFRs if more than one branch per county.

I, the undersigned representative of Radio Satellite Integrators, Inc (Firm Name)  
Los Angeles, California hereby certify that information provided  
 (County) (State)  
 herein is true and correct. This document was executed on this 13 day of 2012

(Authorized Signature)

Brett Lim

(Print Authorized Signature)

**WORK FORCE REPORT** – NAME OF FIRM: Radio Satellite Integrators, Inc DATE: 1/13/2012

OFFICE(S) or BRANCH(ES): \_\_\_\_\_ COUNTY: \_\_\_\_\_

INSTRUCTIONS: For each occupational category, indicate number of males and females in every ethnic group. Total columns in row provided. Sum of all totals should be equal to your total work force. Include all those employed by your company on either a full or part-time basis. The following groups are to be included in ethnic categories listed in columns below:

- |  |  |
|--|--|
| (1) Black, African-American                          | (5) Filipino                                       |
| (2) Hispanic, Latino, Mexican-American, Puerto Rican | (6) White, Caucasian                               |
| (3) Asian, Pacific Islander                          | (7) Other ethnicity; not falling into other groups |
| (4) American Indian, Eskimo                          |  |

OCCUPATIONAL CATEGORY	(1) Black		(2) Hispanic		(3) Asian		(4) American Indian		(5) Filipino		(6) White		(7) Other Ethnicities	
	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)	(M)	(F)
Management & Financial				1							3	1		
Professional			1		2	1								
A&E, Science, Computer					2						3			
Technical	1	1									2			
Sales					1	1					2	1		
Administrative Support				1								1		
Services														
Crafts														
Operative Workers														
Transportation														
Laborers*														

\*Construction laborers and other field employees are not to be included on this page

Totals Each Column	1	1	1	2	5	2					10	3		
--------------------	---	---	---	---	---	---	--	--	--	--	----	---	--	--

Grand Total All Employees

25

Indicate by Gender and Ethnicity the Number of Above Employees Who Are Disabled

Disabled														
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Non-Profit Organizations Only:

Board of Directors														
Volunteers														
Artists														

## ATTACHMENT BB - SUBCONTRACTOR PARTICIPATION LIST

This list shall include the name and complete address of all Subcontractors who qualify as SLBEs or ELBEs. Contractors may also list participation by MBE, WBE, DBE, DBVE and OBE firms. However, no additional points will be awarded for participation by these firms, except that DVBEs that qualify as local businesses shall counted as SLBEs.

Contractor shall also submit Subcontractor commitment letters on Subcontractor's letterhead, no more than one page each, from Subcontractors listed below to acknowledge their commitment to the team, scope of work, and percent of participation in the project.

Subcontractors shall be used in the percentages listed. No changes to this Participation List will be allowed without prior written City approval.

NAME AND ADDRESS SUBCONTRACTORS	SCOPE OF WORK	PERCENT OF CONTRACT	DOLLAR AMOUNT OF CONTRACT	SLBE/ELBE (*MBE/ WBE/DBE/ DVBE/OBE)	** WHERE CERTIFIED
N/A					

\* Listed for informational purposes only.

\*\* Contractor shall indicate if Subcontractor is certified by one of the agencies listed in Section VII of the Equal Opportunity Contracting Program (EOCP) Attachment.

### List of Abbreviations:

Certified Minority Business Enterprise	MBE
Certified Woman Business Enterprise	WBE
Certified Disadvantaged Business Enterprise	DBE
Certified Disabled Veteran Business Enterprise	DVBE
Other Business Enterprise	OBE
Small Local Business Enterprise	SLBE
Emerging Local Business Enterprise	ELBE



## **Equal Employment Opportunity/Affirmative Action (EEO/AA) Policy Statement**

This statement is to reaffirm Radio Satellite Integrators Inc.'s policy on providing Equal Employment Opportunity to all employees and applicants for employment in accordance with all applicable Equal Employment Opportunity/Affirmative Action laws, directives and regulations of Federal, State and Local governing bodies or agencies thereof.

Radio Satellite Integrators, Inc. will not discriminate against any employee or applicant for employment because of race, color, sex, national origin, sexual orientation, age, handicap, marital status, familial status or religion.

Radio Satellite Integrators, Inc. will take Affirmative Action to ensure that all employment practices are free of such discrimination. Such employment practices include, but are not limited to, the following: hiring, upgrading, demotion, transfer, recruitment or recruitment advertising, selection layoff, disciplinary action, termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

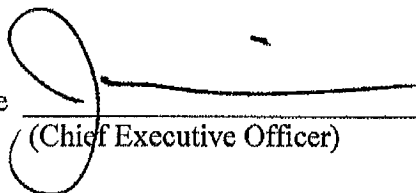
Radio Satellite Integrators, Inc. prohibits the harassment of any employee or job applicant on the basis of their protected class status.

Radio Satellite Integrators, Inc. will commit the necessary time and resources, both financial and human, to achieve the goals of Equal Employment Opportunity and Affirmative Action.

Radio Satellite Integrators, Inc. will evaluate the performance of its management and supervisory personnel on the basis of their involvement in achieving these Affirmative Action objectives as well as other established criteria. Any employee of this Company or subcontractors to this Company who do not comply with the Equal Employment Opportunity Policies and Procedures set forth in this Statement and plan will be subject to disciplinary action. Any subcontractor not complying with all applicable Equal Employment Opportunity/Affirmative Action laws, directives and regulations of the Federal, State and local-governing bodies or agencies thereof, will be subject to appropriate legal sanctions.

Radio Satellite Integrators, Inc. has appointed Jonathan Michels as EEO Coordinator to manage our Equal Employment Opportunity Program. The responsibilities will include monitoring all Equal Employment Opportunity activities and reporting the effectiveness of this Affirmative Action Program, as required by Federal, State and Local agencies. If any employee or applicant for employment believes he/she has been discriminated against, please contact the EEO Coordinator.

Signature

  
(Chief Executive Officer)

Date

3/6/12

**RSI Response for Section L4, Item 4: Tab D – Equal Employment Opportunity (EEO) Policy and Forms and Subcontracting Plan**

Since we are a system provider (hardware and software service), there is very little work that can be subcontracted for our projects. The only work that could possibly be subcontracted is the physical installation of the mobile units in City vehicles. Whenever we subcontract installation for our system, we will make our best efforts to identify a certified DBE/MBE/WBE/SBE for the appropriate work.

Upon examination of the California DOT Office of Business and Economic Opportunity website ([http://www.dot.ca.gov/hq/bep/find\\_certified.htm](http://www.dot.ca.gov/hq/bep/find_certified.htm)), we were unable to identify any prospective DBE/MBE subcontractors in San Diego County who do this type of work.

Since we are a local Southern California company, we will most likely not need to subcontract any of the installation or on-site support work for this project.

If the City is aware of any qualified DBE/MBE firms that can do this work, we would be interested in interviewing them for this possible subcontracting opportunity.

## Attachment 2

CITY OF SAN DIEGO  
ADMINISTRATIVE REGULATION

SUBJECT  PROTECTION OF SENSITIVE INFORMATION AND DATA	Number	Issue	Page
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## 1. PURPOSE

- 1.1 To establish a policy to ensure the confidentiality and protection of Sensitive Information against unauthorized use; to establish procedures to control access to Sensitive Information so that it is only accessible by authorized persons; and to establish safeguards to ensure the appropriate use of Sensitive Information by authorized persons.
- 1.2 To define responsibility and procedures for granting authorized persons access to Sensitive Information.
- 1.3 To define processes by which access to Sensitive Information is administered and to develop control points in compliance with City policy.

## 2. SCOPE

- 2.1 This policy applies to all City employees in all City departments, including independent departments as authorized by the signing authorities below; and to City volunteers, contractors, vendors, and other individuals granted access to Sensitive Information under the City's control; and to all employees, contractors, and vendors of San Diego Data Processing Corporation (SDDPC) granted and/or having access to Sensitive Information by the nature of their support or service functions.
- 2.2 This policy and procedures apply to all Sensitive Information created, owned, stored, managed or under the control of the City of San Diego, regardless of the media which contains the Sensitive Information, including but not limited to paper, microfilm, microfiche or any analog or digital format.
- 2.3 Nothing in this Administrative Regulation supersedes any stricter requirement(s) set by other authorities (i.e., local, state, and/or federal laws, rules or regulations), such as obtaining or retaining employment in a law enforcement agency; nor does this Administrative Regulation supersede any applicable, stricter rules, regulations or policies that affect access to or use of Sensitive Information. In such cases, the department head must ensure implementation or application of any such superseding rules, regulations or policies include adequately strong internal controls over Sensitive Information.

Authorized

  
 MAYOR

  
 PERSONNEL DIRECTOR

  
 CITY CLERK

  
 CITY ATTORNEY

CITY OF SAN DIEGO  
ADMINISTRATIVE REGULATION

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### 3. DEFINITIONS

- 3.1 "Appointing Authority" means an unclassified, management-level position designated by the department head or higher who has the authority to grant permission for an employee or individual to be authorized for access to Sensitive Information.
- 3.2 "Authorized Person" means an employee or other individual who is granted permission to access or use Sensitive Information by an Appointing Authority, as approved by the Information/Data Owner, at the type and the level of access to the specific information required for the performance of his or her job duties.
- 3.3 "Authorization Acknowledgment Form" is the City's official form used to request and authorize an individual's access to or use of Sensitive Information (see Appendix). This form will be available on the City's Intranet site (CityNet) on the 'Forms' page.
- 3.4 "Information/Data Owner" means the department head or designee who is the primary recipient or manager of particular Sensitive Information or who has the responsibility to oversee the collection, maintenance or management of such information or data. There will only be one defined Information/Data Owner for any particular source of data; although other departments may collect and/or access the data. An Information/Data Owner may also be an Appointing Authority, as defined in Section 3.1 above.
- 3.5 "Level of Access" refers to the amount of Sensitive Information for which access is granted for any specific category or type of Sensitive Information, such as full access to all information related to a particular category or document, or limited access to only specific pieces of information (i.e., certain fields in a database) required for the performance of valid job duties.
- 3.6 "Personal Identifying Information" shall include information listed in California Penal Code Section 530.55(b), as amended (Sept. 2006), which reads, in pertinent part:
- (a) "Person" means a natural person, living or deceased, firm, association, organization, partnership, business trust, company, corporation, limited liability company, or public entity, or any other legal entity.
  - (b) "Personal Identifying Information" means any name, address, telephone number, health insurance number, taxpayer identification number, school identification number, state or federal driver's license, or identification number, social security number ... professional or occupational number, mother's maiden name, demand deposit account number, savings account number, checking account number, PIN (personal identification number) or password, alien registration number, government passport number, date of birth, unique biometric data including fingerprint, facial scan identifiers, voiceprint, retina or



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iris image, or other unique physical representation, unique electronic data including information identification number assigned to the person, address or routing code, telecommunication identifying information or access device, information contained in a birth or death certificate, or credit card number of an individual person, or an equivalent form of identification.

3.7 For the purpose of this policy, "Sensitive Information" shall mean:

3.7.1 Personal Identifying Information (as defined above), also including debit card number of an individual person, and where home/personal address and telephone number are included and work/office address and telephone number are excluded (i.e., the City Directory is not considered Sensitive Information); and

3.7.2 Any information that is possessed by the City of San Diego which is not subject to the California Public Records Act (refer to Administrative Regulation 95.20), and which may be used for other than the intended purpose of such information, to cause harm to or otherwise jeopardize the City of San Diego or any individual, or used in violation of any local, state or federal law (for example the Health Insurance Portability and Accountability Act of 1996 (HIPAA)).

3.8 "Sensitive Information Custodian" is the person who manages the physical or computer-based access to Sensitive Information; for example an office manager or records manager who controls access to locked file rooms/cabinets, or a computer systems administrator who manages the creation of user accounts and passwords to provide specific access to particular data. A Sensitive Information Custodian may also be an Information/Data Owner, as defined in Section 3.4 above.

3.9 "Type of Access" refers to the following: (a) Read Only, (b) Write/Create, (c) Edit/Modify, and (d) Delete.

#### 4. GENERAL POLICY

4.1 Sensitive Information shall be maintained in a confidential manner and access restricted to only employees or individuals properly authorized by his or her Appointing Authority and approved by the Information/Data Owner, based on verified business needs to have access to such information and/or in compliance with specific legal requirements.

4.2 Contractors and vendors or other non-City employees who are authorized to access or use Sensitive Information, shall be required to enter into agreements stating that the individuals specified for this access and their employing Contractor/Vendor agree to be contractually bound by the terms and conditions of this policy, including personal liability, as part of their contract or agreement prior to being granted access to Sensitive Information.

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- 4.3 Authorization to access or use Sensitive Information shall be based on a functional role (job duties) and not linked directly with a specific individual, such that when an authorized person's job duties no longer require access to or use of Sensitive Information, the ability to access or use such information shall be revoked. At no time shall a contractor's or vendor's access to Sensitive Information extend beyond the termination of the authorizing contract, and such access shall be revoked as soon as the duties requiring access or use have ended, regardless of the end date of the contract.
- 4.4 The Information/Data Owner shall specify the type and the level of access that should be assigned to various functional roles that require access to the Sensitive Information based on an employee's or individual's job requirements.
- 4.5 Authorized Persons shall access or use Sensitive Information only for its intended purpose for which it was obtained and maintained by the City of San Diego. An employee or individual authorized to access or use Sensitive Information shall sign an Authorization Acknowledgement Form stating he or she has read, understands, and agrees to abide by this policy.
- 4.6 As a standard IT security measure, Authorized Persons shall not share their User ID and/or password with anyone else, and shall not have their User ID and/or password written down in any unsecured location (e.g., anywhere around their work location). "Generic" User IDs shall not be used for system access to Sensitive Information; each Authorized Person must use an assigned, unique User ID that is directly linked with the user's name. As a standard physical security measure, Authorized Persons shall not share their building or facility access key card or key(s) with anyone else, nor shall they allow access into secured areas by unauthorized persons.
- 4.7 Violation of this policy, either by unauthorized persons accessing or attempting to access Sensitive Information, or by Authorized Persons accessing or using Sensitive Information for other than its intended purpose or beyond the scope of their duties, may result in disciplinary action, up to and including termination of employment, and also subject the violating individual(s) to personal liability without the option of City legal defense. In the case of contractors or vendors, violation of this policy will be considered a breach of contract and appropriate actions taken on that basis. If deemed necessary, information regarding employee, volunteer, contractor or vendor violation of this policy may be referred to the appropriate agency for any civil and/or criminal action, as applicable.
- 4.8 Appointing Authorities shall review the list of their employees, contractors or other individuals who they have designated as Authorized Persons with access to Sensitive Information, at least semi-annually, to ensure continued authorization is warranted and to update (add, delete or modify) the authorization list appropriately.

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- 4.9 Information/Data Owners shall verify and document semi-annually that the Appointing Authorities performed a thorough review of authorized users in compliance with this policy (Section 4.8), by comparing the Appointing Authority's report with a list of individuals currently authorized to access the Sensitive Information over which the Information/Data Owner has control and authority. For internal control purposes, to maintain segregation of duties, this verification must be performed by someone other than the Appointing Authority who submitted the semi-annual review of Authorized Persons. All discrepancies shall be reported back to the impacted Appointing Authority for appropriate corrective action. Information/Data Owners shall retain records of such reviews and actions for the period of time set within the citywide or departmental Records Retention Schedule as approved by the City Clerk.
- 4.10 Sensitive Information stored in City computer systems shall be secured and maintained in accordance with applicable provisions of the Information Security Guidelines and Standards, as amended.
- 4.11 Sensitive Information stored in paper or other non-digital formats shall have appropriate physical security, and access to such information shall also comply with Administrative Regulation 95.10 for validating the identity of the individual requesting authorized access.
- 4.12 Upon the discovery of any breach of the protection of Sensitive Information through the accidental, inadvertent or purposeful release of such information to any unauthorized persons, the person discovering such breach should immediately notify the Information/Data Owner or their Appointing Authority, and, if the information was stored on City computer systems, also notify the Information Security Manager in the Department of Information Technology.
- 4.12.1 Depending on the nature and scope of such breach and release of information, additional notifications must comply with applicable state and federal regulations.
- 4.12.2 The Information/Data Owner, in coordination with the Information Security Manager from the Department of Information Technology (if applicable), should immediately take whatever steps are deemed necessary to stop any further breach of the protected information and to minimize any potential or actual losses or damages to the City of San Diego.

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## 5. PROCEDURES

### Responsibility

#### 5.1. Supervisor

### Action

When an employee's, volunteer's or contractor's job duties require access to or use of Sensitive Information, the immediate supervisor will complete an Authorization Acknowledgment Form. In addition, the supervisor must ensure that the proper system access/account request form and process is followed for the specific computer system where the Authorized Person needs access, specifying the nature of the job duties and the level and type of access or use requested. The supervisor will ensure the accuracy and completeness of information on the forms. After obtaining the employee's signature, the acknowledgement and request forms will be routed to the Appointing Authority for approval. Likewise, when an employee's, volunteer's or contractor's job duties change such that access to or use of Sensitive Information is no longer needed, the immediate supervisor will notify both the Appointing Authority and the Information/Data Owner, as soon as possible (no more than five (5) business days).

#### 5.2. Authorized Person (employee, volunteer, contractor, vendor or other individual being authorized for access)

Any person being given access to Sensitive Information must sign the Authorization Acknowledgement Form stating he or she has read, understands, and agrees to comply with this policy for access or use and protection of such information. A copy of the final, approved form shall be kept in the employee's departmental personnel file, as the Appointing Authority's record; or for volunteers, on file with the department where assigned; or for a contractor, on file with the contract manager.

#### 5.3. Department Appointing Authority

The Appointing Authority having management control over the employee, volunteer, contractor,

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vendor or other individual seeking authorization to access Sensitive Information, shall review the Authorization Acknowledgement and system access/account request forms for appropriateness of the job functions for the type and level of access requested while considering appropriate segregation of duties, and ensure the forms are signed by both the individual and supervisor. The Appointing Authority will sign either approval or denial of the request, providing the reasons for any denial, and route the approved request form to the appropriate Information/Data Owner(s), or route a denied form back to the supervisor. Appointing Authorities shall maintain a copy of all authorization forms they approve, including those for non-City employees (i.e., volunteers and contractors). Any changes reported in the job duties of Authorized Persons which require a change in the access to or use of Sensitive Information must be immediately communicated to the Information/Data Owner to initiate the appropriate change in access. The semi-annual reviews should take place in May and November each year. The Appointing Authority will submit documentation of each review to the Information/Data Owner and these records will be retained by the department for the period of time set by the citywide or departmental Records Retention Schedule as approved by the City Clerk.

- 5.4. Information/Data Owner (owner of the information, regardless of its format or mechanism of access, [i.e., computerized system, hard copy file, etc.])

The Information/Data Owner for each different source of Sensitive Information covered by an approved access request form will review each request to ensure the type and level of access requested is appropriate for the job functions of the individual seeking access. Upon confirmation of the business need to have access to Sensitive Information, the Information/Data Owner will sign approval to grant access, and

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may modify the type or level of access granted, as he or she deems necessary and appropriate, in consultation with the requesting Appointing Authority. The Information/Data Owner will initiate any further actions necessary to grant access to the Authorized Person (such as any computer system access processes). Information/Data Owners will maintain a list of individuals currently authorized access to their Sensitive Information and provide such list to the appropriate Appointing Authority for semi-annual review at the end of April and October each year.

- 5.5. Sensitive Information Custodian (Administrator of the format and/or mechanism of access [i.e., computerized system or hard copy file] for the given information)

The Authorized Person's access to the identified Sensitive Information will be set up following the established procedures either in the IT Security Guidelines and Standards for access to electronic or digital data or following departmental internal controls for paper or physical records, based on the nature (media/format) of the Sensitive Information.

- 5.6. Department of Information Technology

Annually review this policy for any necessary updates or revisions, taking into account changes in City organization and IT systems. Maintain the list of Information/Data Owners and update it annually. Maintain the necessary correlation between this policy and other IT security policies and/or regulations. Ensure that San Diego Data Processing Corporation (SDDPC) system administrators comply with this and other IT security policies. The Department of Information Technology is also responsible for ensuring that the requirements of this policy are communicated to all employees at least every two years, using citywide and/or departmental training or communication channels.

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Responsibility

5.7. Purchasing & Contracting  
Department

Action

Ensure that this policy is included as an Addendum to or within the Terms and Conditions of signed contracts or agreements, for all contracts and/or agreements that include a contractor's or vendor's need to access or use the City's Sensitive Information.

APPENDIXLegal References**City Administrative Regulations:**

AR 45.50 "Private Use of City Labor, Materials, Equipment and Supplies Prohibited"

AR 90.63 "Information Security Policy"

AR 95.10 "Identification of City Employees and Controlled Access to City Facilities"

AR 95.20 "Public Records Act Requests and Civil Subpoenas; Procedures for Furnishing Documents and Recovering Costs"

AR 95.60, "Conflict of Interest and Employee Conduct"

**Civil Service Rules and City Personnel Manual:**

Civil Service Rules, Definitions (p.1), "Appointing Authority"

Civil Service Rule XI, "Resignation, Removal, Suspension, Reduction in Compensation, Demotion"

Personnel Manual, Index Code A-3 "Improper Use of City Resources"

Personnel Manual, Index Code G-1 "Code of Ethics and Conduct"

IT Security Guidelines and Standards

Employee Performance Plans, Ethics and Integrity Section

Applicable California State Laws

Applicable Federal Laws

Forms Involved

Form DoIT-010, "Sensitive Information Authorization Acknowledgement"

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Sensitive Information  
Sensitive Data  
Information Security  
Protection of Sensitive Information

Distribution

All Departments (Mayoral and Non-Mayoral)

Administering  
Department

Department of Information Technology



CITY OF SAN DIEGO  
Sensitive Information Authorization Acknowledgement Form – City Employees

**Authorized Person (City Employee requesting authorized access to Sensitive Information):**

<i>Name (Printed)</i>	<i>Job Classification</i>	<i>Network (AD) Login/User ID</i>
<i>Department / Division</i>		
<i>Mail Station</i>	<i>Office Phone</i>	<i>Office FAX</i>
<i>Supervisor's Name (Printed)</i>	<i>Supervisor's Phone</i>	

**Policy Summary (pertinent excerpts from Administrative Regulation 90.64):**

4.1 Sensitive Information shall be maintained in a confidential manner and access restricted to only employees or individuals properly authorized by his or her Appointing Authority and approved by the Information/Data Owner, based on verified business needs to have access to such information and/or in compliance with specific legal requirements.

4.3 Authorization to access or use Sensitive Information shall be based on a functional role (job duties) and not linked directly with a specific individual, such that when an authorized person's job duties no longer require access to or use of Sensitive Information, the ability to access or use such information shall be revoked. [...]

4.5 Authorized Persons shall access or use Sensitive Information only for its intended purpose for which it was obtained and maintained by the City of San Diego. An employee or individual authorized to access or use Sensitive Information shall sign an Authorization Acknowledgement Form stating he or she has read, understands, and agrees to abide by this policy.

4.7 Violation of this policy, either by unauthorized persons accessing or attempting to access Sensitive Information, or by Authorized Persons accessing or using Sensitive Information for other than its intended purpose or beyond the scope of their duties, may result in disciplinary action, up to and including termination of employment, and also subject the violating individual(s) to personal liability without the option of City legal defense. In the case of contractors or vendors, violation of this policy will be considered a breach of contract and appropriate actions taken on that basis. If deemed necessary, information regarding employee, volunteer, contractor or vendor violation of this policy may be referred to the appropriate agency for any civil and/or criminal action, as applicable.

**Acknowledgement**

By signing below, the above employee acknowledges that he or she has been provided a full copy of A.R. 90.64 ("Protection of Sensitive Information and Data"), which has been discussed with his or her supervisor, and further acknowledges that he or she has read, understands, and agrees to comply with the provisions of the policy. Employee understands that this form will be kept as part of his or her permanent employee file, and that he or she may receive a copy, if requested. The supervisor acknowledges that he or she has discussed the policy with the above employee and understands the supervisor's obligations regarding employee's access to Sensitive Information under this policy.

\_\_\_\_\_  
Employee's Signature\_\_\_\_\_  
Date Signed\_\_\_\_\_  
Supervisor's Signature\_\_\_\_\_  
Date Signed

CITY OF SAN DIEGO  
Sensitive Information Authorization Acknowledgement Form -- City Volunteers

**Authorized Person (City Volunteer requesting authorized access to Sensitive Information):**

<i>Name (Printed)</i>	<i>Volunteer Assignment</i>	<i>Network (AD) Login/User ID</i>
<i>City Department / Division (where assigned as volunteer)</i>		
<i>Work Location</i>		<i>Contact Phone</i>
<i>City Supervisor's Name (Printed)</i>	<i>City Supervisor's Phone</i>	<i>City Supervisor's Mail Station</i>

**Policy Summary (pertinent excerpts from Administrative Regulation 90.64):**

4.1 Sensitive Information shall be maintained in a confidential manner and access restricted to only employees or individuals properly authorized by his or her Appointing Authority and approved by the Information/Data Owner, based on verified business needs to have access to such information and/or in compliance with specific legal requirements.

4.3 Authorization to access or use Sensitive Information shall be based on a functional role (job duties) and not linked directly with a specific individual, such that when an authorized person's job duties no longer require access to or use of Sensitive Information, the ability to access or use such information shall be revoked. At no time shall a contractor's or vendor's access to Sensitive Information extend beyond the termination of the authorizing contract, and such access shall be revoked as soon as the duties requiring access or use have ended, regardless of the end date of the contract.

4.5 Authorized Persons shall access or use Sensitive Information only for its intended purpose for which it was obtained and maintained by the City of San Diego. An employee or individual authorized to access or use Sensitive Information shall sign an Authorization Acknowledgement Form stating he or she has read, understands, and agrees to abide by this policy.

4.7 Violation of this policy, either by unauthorized persons accessing or attempting to access Sensitive Information, or by Authorized Persons accessing or using Sensitive Information for other than its intended purpose or beyond the scope of their duties, may result in disciplinary action, up to and including termination of employment, and also subject the violating individual(s) to personal liability without the option of City legal defense. In the case of contractors or vendors, violation of this policy will be considered a breach of contract and appropriate actions taken on that basis. If deemed necessary, information regarding employee, volunteer, contractor or vendor violation of this policy may be referred to the appropriate agency for any civil and/or criminal action, as applicable.

**Acknowledgement**

By signing below, the above City Volunteer acknowledges that he or she has been provided a full copy of A.R. 90.64 ("Protection of Sensitive Information and Data"), which has been discussed with the City Supervisor, and further acknowledges that he or she has read, understands, and agrees to comply with the provisions of the policy. City Volunteer understands that this form will be kept on file with the City Department; and that he or she may receive a copy, if requested. The City Supervisor acknowledges that he or she has discussed the policy with the above volunteer and understands the supervisor's obligations regarding the volunteer's access to Sensitive Information under this policy.

\_\_\_\_\_  
Volunteer's Signature

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
City Supervisor's Signature

\_\_\_\_\_  
Date Signed

CITY OF SAN DIEGO  
Sensitive Information Authorization Acknowledgement Form – City Contractors/Vendors

**Authorized Person (City Contractor/Vendor requesting authorized access to Sensitive Information):**

<i>Name (Printed)</i>	<i>eMail Address</i>	<i>Network (AD) Login/User ID</i>
<i>Company/Organization</i>		<i>Contractor/Vendor Office Phone</i>
<i>City Department (managing contract)</i>		<i>Contractor/Vendor Office FAX</i>
<i>City Contract Manager's Name (Printed)</i>	<i>City Contract Manager's Phone</i>	<i>City Contract Manager's Mail Sta.</i>

**Policy Summary (pertinent excerpts from City Administrative Regulation 90.64):**

4.1 Sensitive Information shall be maintained in a confidential manner and access restricted to only employees or individuals properly authorized by his or her Appointing Authority and approved by the Information/Data Owner, based on verified business needs to have access to such information and/or in compliance with specific legal requirements.

4.3 Authorization to access or use Sensitive Information shall be based on a functional role (job duties) and not linked directly with a specific individual, such that when an authorized person's job duties no longer require access to or use of Sensitive Information, the ability to access or use such information shall be revoked. At no time shall a contractor's or vendor's access to Sensitive Information extend beyond the termination of the authorizing contract, and such access shall be revoked as soon as the duties requiring access or use have ended, regardless of the end date of the contract.

4.5 Authorized Persons shall access or use Sensitive Information only for its intended purpose for which it was obtained and maintained by the City of San Diego. An employee or individual authorized to access or use Sensitive Information shall sign an Authorization Acknowledgement Form stating he or she has read, understands, and agrees to abide by this policy.

4.7 Violation of this policy, either by unauthorized persons accessing or attempting to access Sensitive Information, or by Authorized Persons accessing or using Sensitive Information for other than its intended purpose or beyond the scope of their duties, may result in disciplinary action, up to and including termination of employment, and also subject the violating individual(s) to personal liability without the option of City legal defense. In the case of contractors or vendors, violation of this policy will be considered a breach of contract and appropriate actions taken on that basis. If deemed necessary, information regarding employee, volunteer, contractor or vendor violation of this policy may be referred to the appropriate agency for any civil and/or criminal action, as applicable.

**Acknowledgement**

By signing below, the above City Contractor/Vendor acknowledges the he or she understands that the Terms and Conditions of the underlying City Contract contain the provisions of the full policy stated above, and he or she agrees to comply with such contract provisions. City Contractor/Vendor understands that this form will be kept on file with the underlying contract documents in the City Purchasing & Contracting Department, and that he or she may receive a copy, if requested. The City Contract Manager acknowledges that he or she has discussed the contract Terms and Conditions related to this policy with the above Contractor/Vendor and understands the supervisor's obligations regarding the Contractor's/Vendor's access to the City's Sensitive Information under this policy.

\_\_\_\_\_  
Contractor's/Vendor's Signature

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
City Contract Manager's Signature

\_\_\_\_\_  
Date Signed

CITY OF SAN DIEGO  
Sensitive Information Authorization Acknowledgement Form -- City Contractors/Vendors

Authorized Person (City Contractor/Vendor requesting authorized access to Sensitive Information):

Name (Printed)	eMail Address	Network (AD) Login/User ID
Company/Organization <b>Radio Satellite Integrators</b>		Contractor/Vendor Office Phone
City Department (managing contract)		Contractor/Vendor Office FAX
City Contract Manager's Name (Printed)	City Contract Manager's Phone	City Contract Manager's Mail Stop

**Policy Summary** (pertinent excerpts from City Administrative Regulation 90.64):

4.1 Sensitive Information shall be maintained in a confidential manner and access restricted to only employees or individuals properly authorized by his or her Appointing Authority and approved by the Information/Data Owner, based on verified business needs to have access to such information and/or in compliance with specific legal requirements.

4.3 Authorization to access or use Sensitive Information shall be based on a functional role (job duties) and not linked directly with a specific individual, such that when an authorized person's job duties no longer require access to or use of Sensitive Information, the ability to access or use such information shall be revoked. At no time shall a contractor's or vendor's access to Sensitive Information extend beyond the termination of the authorizing contract, and such access shall be revoked as soon as the duties requiring access or use have ended, regardless of the end date of the contract.

4.5 Authorized Persons shall access or use Sensitive Information only for its intended purpose for which it was obtained and maintained by the City of San Diego. An employee or individual authorized to access or use Sensitive Information shall sign an Authorization Acknowledgement Form stating he or she has read, understands, and agrees to abide by this policy.

4.7 Violation of this policy, either by unauthorized persons accessing or attempting to access Sensitive Information, or by Authorized Persons accessing or using Sensitive Information for other than its intended purpose or beyond the scope of their duties, may result in disciplinary action, up to and including termination of employment, and also subject the violating individual(s) to personal liability without the option of City legal defense. In the case of contractors or vendors, violation of this policy will be considered a breach of contract and appropriate actions taken on that basis. If deemed necessary, information regarding employee, volunteer, contractor or vendor violation of this policy may be referred to the appropriate agency for any civil and/or criminal action, as applicable.

**Acknowledgement**

By signing below, the above City Contractor/Vendor acknowledges that he or she understands that the Terms and Conditions of the underlying City Contract contain the provisions of the full policy stated above, and he or she agrees to comply with such contract provisions. City Contractor/Vendor understands that this form will be kept on file with the underlying contract documents in the City Purchasing & Contracting Department, and that he or she may receive a copy, if requested. The City Contract Manager acknowledges that he or she has discussed the contract Terms and Conditions related to this policy with the above Contractor/Vendor and understands the supervisor's obligations regarding the Contractor's/Vendor's access to the City's Sensitive Information under this policy.

\_\_\_\_\_  
Contractor's/Vendor's Signature

**1-13-12**  
\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
City Contract Manager's Signature

\_\_\_\_\_  
Date Signed

**ATTACHMENT 3**

**CITY OF SAN DIEGO**

**MOBILE DEVICES AND NETWORK DIAGRAMS**

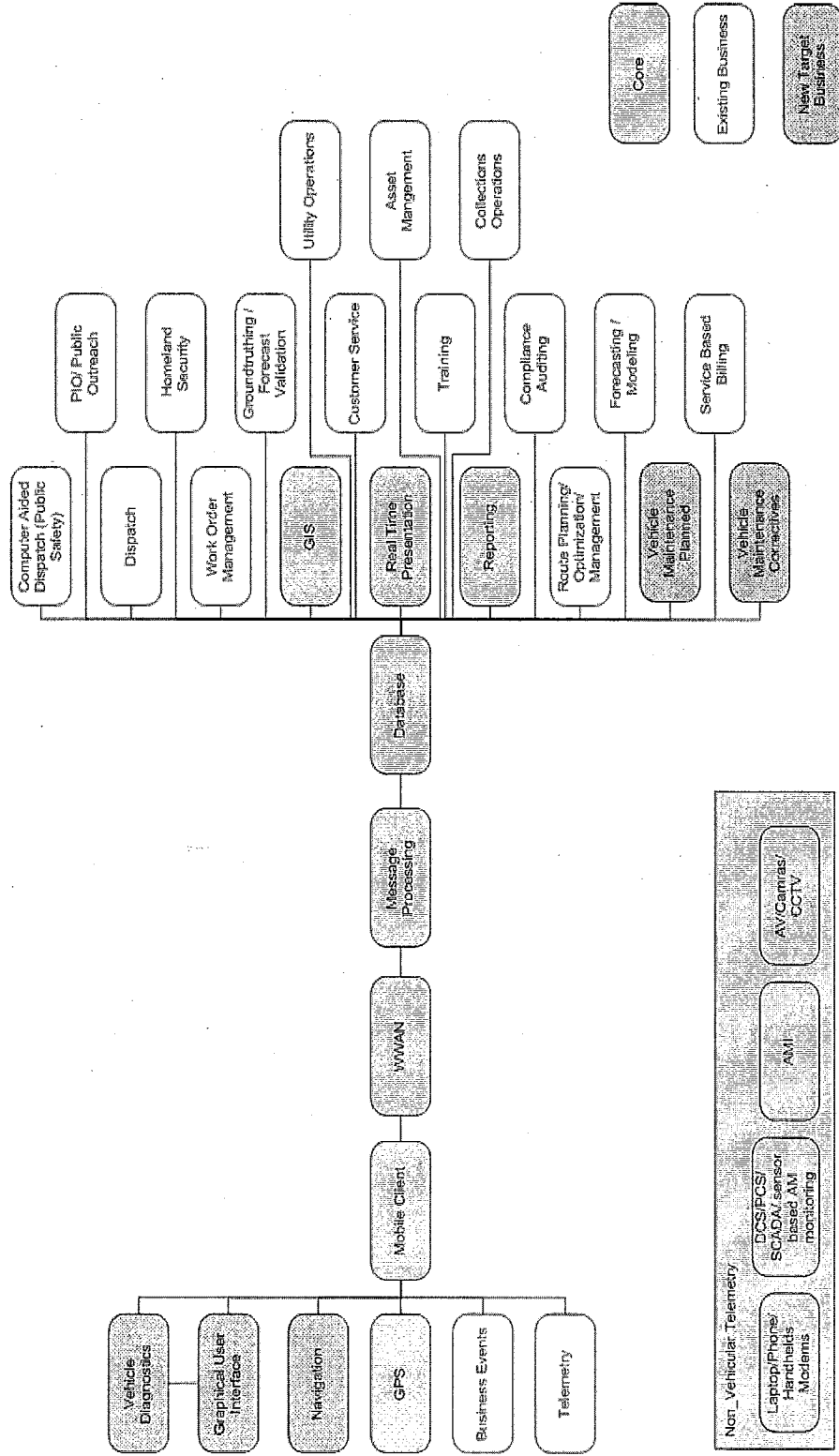
The following is a representative sample of mobile devices and network diagrams currently in use by the City of San Diego.

- CalAMP LMU-4100 with associated cabling and antennae
- CalAMP LMU-4200
- Sierra AirCard 402 (PCMCIA Cards)
- Sierra AirLink PinPoint X (being phased out)
- GPS Logic L140-73103-10
- VDO Fleet Manager 200
- VDO Fleet Manager 200 *Plus*

# ATTACHMENT 3

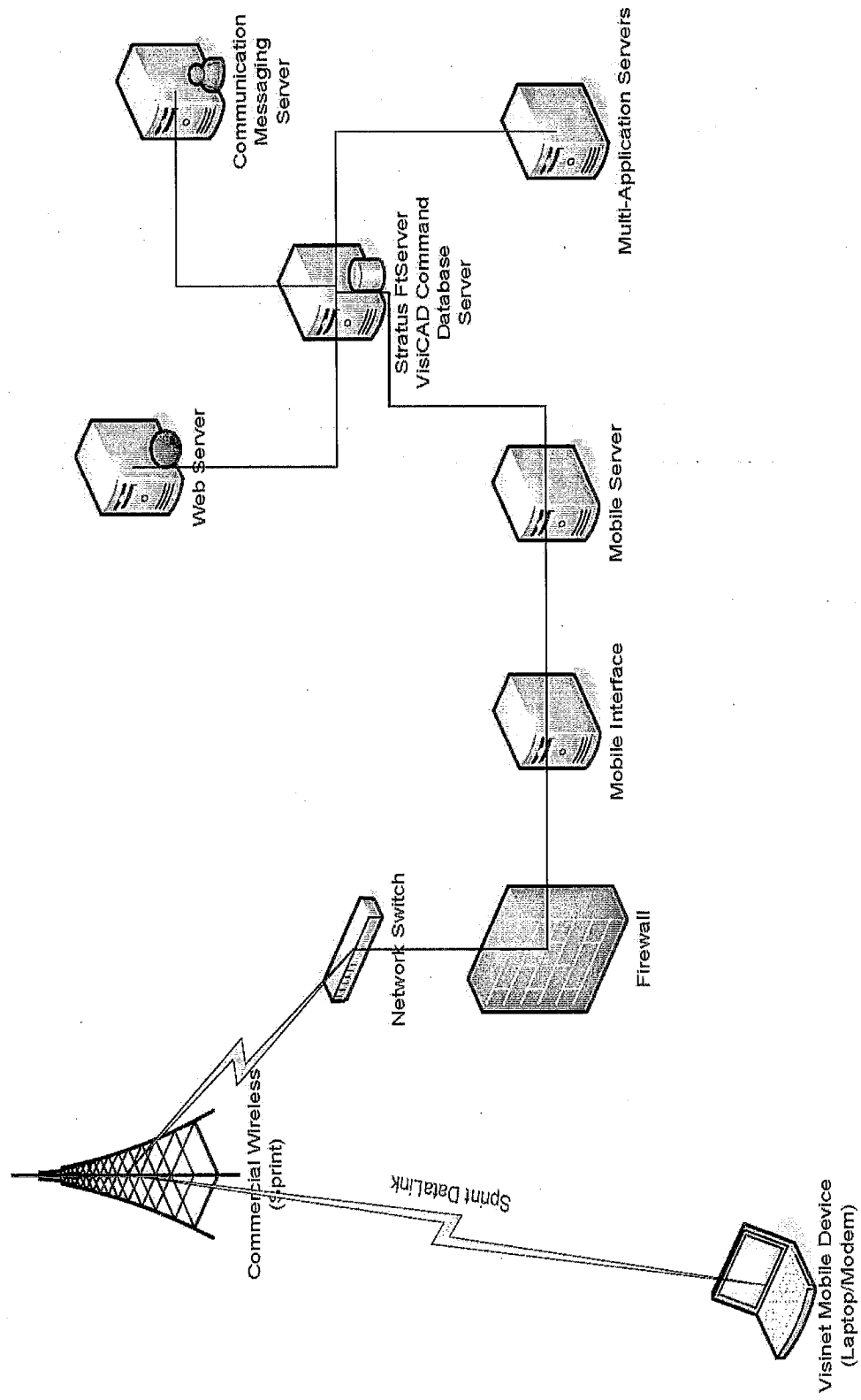
Public Utilities Department and Environmental Services Department Network Diagram

## Enterprise AVL Architectural Building Blocks



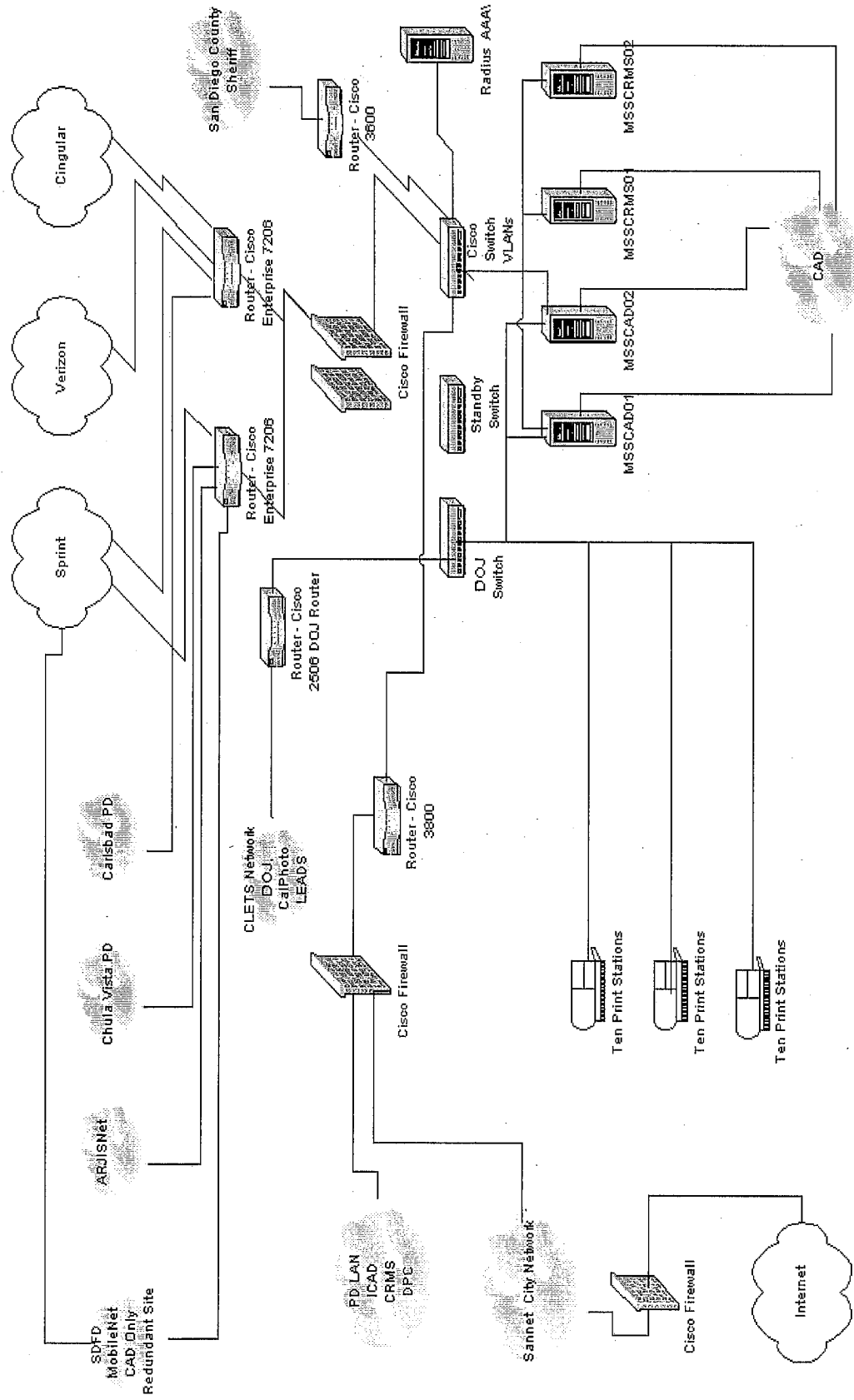
### ATTACHMENT 3

Fire-Rescue Department Network Diagram



### ATTACHMENT 3

Police Department Network Diagram





**THIS DOCUMENT MUST BE COMPLETED,  
SIGNED, AND SUBMITTED PRIOR TO CONTRACT AWARD  
DRUG-FREE WORKPLACE  
CONTRACTOR CERTIFICATION**

**BID NUMBER:**

**PROJECT TITLE:** AVL/GPS SYSTEM

I hereby certify that I am familiar with the requirements of **San Diego City Council Policy No. 100-17** regarding Drug-Free Workplace as outlined in the request for proposals, and that,

RADIO SATELLITE INTEGRATORS, INC

(Name under which business is conducted)

has in place a Drug-Free Workplace Program that complies with said policy. I further certify that each subcontract agreement for this project contains language which indicates the Subcontractor's agreement to abide by the provisions of subdivisions a) through c) of the policy as outlined.

SIGNED: 

PRINTED NAME: Brett Lim

TITLE: Director of Marketing

COMPANY NAME: Radio Satellite Integrators, Inc

ADDRESS: 19144 Van Ness Ave

Torrance, CA 90501

TELEPHONE: (310) 787-7700 FAX: (310) 787-7435

DATE: 1/13/2012

# **EQUAL BENEFITS ORDINANCE CERTIFICATION OF COMPLIANCE**



For additional information, contact:

CITY OF SAN DIEGO

EQUAL BENEFITS PROGRAM

202 C Street, MS 9A, San Diego, CA 92101

Phone (619) 533-3948 Fax (619) 533-3220

COMPANY INFORMATION	
Company Name: Radio Satellite Integrators	Contact Name: Brett Lim
Company Address: 19144 Van Ness Ave	Contact Phone: (310) 787-7700
	Contact Email: blim@radsat.com
CONTRACT INFORMATION	
Contract Title: AVL/GPS	Start Date:
Contract Number (if no number, state location): 10022954-12-Z	End Date:
SUMMARY OF EQUAL BENEFITS ORDINANCE REQUIREMENTS	
<p>The Equal Benefits Ordinance [EBO] requires the City to enter into contracts only with contractors who certify they will provide and maintain equal benefits as defined in San Diego Municipal Code §22.4302 for the duration of the contract. To comply:</p> <ul style="list-style-type: none"> <li>Contractor shall offer equal benefits to employees with spouses and employees with domestic partners. <ul style="list-style-type: none"> <li>Benefits include health, dental, vision insurance; pension/401(k) plans; bereavement, family, parental leave; discounts, child care; travel/relocation expenses; employee assistance programs; credit union membership; or any other benefit.</li> <li>Any benefit not offered to an employee with a spouse, is not required to be offered to an employee with a domestic partner.</li> </ul> </li> <li>Contractor shall post notice of firm's equal benefits policy in the workplace and notify employees at time of hire and during open enrollment periods.</li> <li>Contractor shall allow City access to records, when requested, to confirm compliance with EBO requirements.</li> <li>Contractor shall submit <i>EBO Certification of Compliance</i>, signed under penalty of perjury, prior to award of contract.</li> </ul> <p>NOTE: This summary is provided for convenience. Full text of the EBO and its Rules are posted at <a href="http://www.sandiego.gov/administration">www.sandiego.gov/administration</a>.</p>	
CONTRACTOR EQUAL BENEFITS ORDINANCE CERTIFICATION	
Please indicate your firm's compliance status with the EBO. The City may request supporting documentation.	
<input checked="" type="checkbox"/> I affirm <b>compliance</b> with the EBO because my firm (contractor must <u>select one</u> reason): <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Provides equal benefits to spouses and domestic partners.</li> <li><input type="checkbox"/> Provides no benefits to spouses or domestic partners.</li> <li><input type="checkbox"/> Has no employees.</li> <li><input type="checkbox"/> Has collective bargaining agreement(s) in place prior to January 1, 2011, that has not been renewed or expired.</li> </ul>	
<input type="checkbox"/> I request the City's approval to pay affected employees a <b>cash equivalent</b> in lieu of equal benefits and verify my firm made a reasonable effort but is not able to provide equal benefits upon contract award. I agree to notify employees of the availability of a cash equivalent for benefits available to spouses but not domestic partners and to continue to make every reasonable effort to extend all available benefits to domestic partners.	
<p>It is unlawful for any contractor to knowingly submit any false information to the City regarding equal benefits or cash equivalent associated with the execution, award, amendment, or administration of any contract. [San Diego Municipal Code §22.4307(a)]</p> <p>Under penalty of perjury under laws of the State of California, I certify the above information is true and correct. I further certify that my firm understands the requirements of the Equal Benefits Ordinance and will provide and maintain equal benefits for the duration of the contract or pay a cash equivalent if authorized by the City.</p>	
Brett Lim, Director of Marketing	1/13/2012
Name/Title of Signatory	Signature
	Date
FOR OFFICIAL CITY USE ONLY	
Receipt Date:	EBO Analyst: <input type="checkbox"/> Approved <input type="checkbox"/> Not Approved – Reason:

rev 02/15/2011

**City of San Diego Purchasing & Contracting Department**  
**CONTRACTOR STANDARDS**  
*Pledge of Compliance*

Effective December 24, 2008, the Council of the City of San Diego adopted Ordinance No. O-19808 to extend the Contractor Standards Ordinance to all contracts greater than \$50,000. The intent of the Contractor Standards clause of San Diego Municipal Code §22.3224 is to ensure the City of San Diego conducts business with firms that have the necessary quality, fitness and capacity to perform the work set forth in the contract.

To assist the Purchasing Agent in making this determination and to fulfill the requirements of §22.3224(d), each bidder/proposer must complete and submit this *Pledge of Compliance* with the bid/proposal. If a non-competitive process is used to procure the contract, the proposed contractor must submit this completed *Pledge of Compliance* prior to execution of the contract. A submitted *Pledge of Compliance* is a public record and information contained within will be available for public review for at least ten (10) calendar days, except to the extent that such information is exempt from disclosure pursuant to applicable law.

All responses must be typewritten or printed in ink. If an explanation is requested or additional space is required, respondents must use the *Pledge of Compliance Attachment "A"* and sign each page. The signatory guarantees the truth and accuracy of all responses and statements. Failure to submit this completed *Pledge of Compliance* may make the bid/proposal non-responsive and disqualified from the bidding process. If a change occurs which would modify any response, Contractor must provide the Purchasing Agent an updated response within thirty (30) calendar days.

**A. PROJECT TITLE:**

AVL/GPS

**B. BIDDER/CONTRACTOR INFORMATION:**

Radio Satellite Integrators, Inc

Legal Name	19144 Van Ness Ave	Torrance	DBA CA	90501
Street Address		City	State	Zip
Brett Lim, Director of Marketing	(310) 787-7700	(310) 787-7435		
Contact Person, Title	Phone	Fax		

**C. OWNERSHIP AND NAME CHANGES:**

1. In the past five (5) years, has your firm changed its name?  
 ? Yes ☐ No ☒

If **Yes**, use *Pledge of Compliance Attachment "A"* to list all prior legal and DBA names, addresses and dates when used. Explain the specific reasons for each name change.

2. In the past five (5) years, has a firm owner, partner or officer operated a similar business?  
 ? Yes ☐ No ☒

If **Yes**, use *Pledge of Compliance Attachment "A"* to list names and addresses of all businesses and the person who operated the business. Include information about a similar business only if an owner, partner or officer of your firm holds or has held a similar position in another firm.

**D. BUSINESS ORGANIZATION/STRUCTURE:** Indicate the organizational structure of your firm. Check one only on this page. Use *Pledge of Compliance Attachment "A"* if more space is required.

☒ **Corporation** Date incorporated: \_\_\_\_/\_\_\_\_/1990 State of incorporation: California

List corporation's current officers: President: Jonathan Michels  
Vice Pres: Brian Burda  
Secretary: \_\_\_\_\_  
Treasurer: \_\_\_\_\_

Is your firm a publicly traded corporation? ☐ Yes ☒ No

If Yes, name those who own five percent (5%) or more of the corporation's stocks:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ **Limited Liability Company** Date formed: \_\_\_\_/\_\_\_\_/\_\_\_\_ State of formation: \_\_\_\_\_

List names of members who own five percent (5%) or more of the company:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ **Partnership** Date formed: \_\_\_\_/\_\_\_\_/\_\_\_\_ State of formation: \_\_\_\_\_

List names of all firm partners:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ **Sole Proprietorship** Date started: \_\_\_\_/\_\_\_\_/\_\_\_\_

List all firms you have been an owner, partner or officer with during the past five (5) years. Do not include ownership of stock in a publicly traded company:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☐ **Joint Venture** Date formed: \_\_\_\_/\_\_\_\_/\_\_\_\_

List each firm in the joint venture and its percentage of ownership:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Note:** Each member of a Joint Venture must complete a separate *Contractor Standards Pledge of Compliance* for a Joint Venture's submission to be considered responsive.

**E. FINANCIAL RESOURCES AND RESPONSIBILITY:**

1. Is your firm in preparation for, in the process of, or in negotiations toward being sold?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances, including name of the buyer and principal contact information.

2. In the past five (5) years, has your firm been denied bonding?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances; include bonding company name.

3. In the past five (5) years, has a bonding company made any payments to satisfy claims made against a bond issued on your firm's behalf or a firm where you were the principal?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances.

**F. PERFORMANCE HISTORY:**

1. In the past five (5) years, has your firm been found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement, for defaulting or breaching a contract with a government agency?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances.

2. In the past five (5) years, has a government agency terminated your firm's contract prior to completion?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances and provide principal contact information.

**G. COMPLIANCE:**

1. In the past five (5) years, has your firm or any firm owner, partner, officer, executives or management been criminally penalized or found civilly liable, either in a court of law or pursuant to the terms of a settlement agreement for violating any federal, state or local law in performance of a contract, including but not limited to laws regarding health and safety, labor and employment, wage and hours, and licensing laws which affect employees?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances surrounding each instance; include name of entity involved, specific infraction(s) or violation(s), dates of instances, and outcome with current status.

2. In the past five (5) years, has your firm been debarred or determined to be non-responsible by a government agency?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances of each instance; include name of entity involved, specific infraction, dates, and outcome.

**H. BUSINESS INTEGRITY:**

1. In the past five (5) years, has your firm been convicted of or found liable in a civil suit for making a false claim or material misrepresentation to a private or governmental entity?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances of each instance; include the entity involved, specific infraction(s) or violation(s), dates, outcome and current status.

2. In the past five (5) years, has your firm or any of its executives, management personnel, or owners been convicted of a crime, including misdemeanors, or been found liable in a civil suit involving the bidding, awarding, or performance of a government contract?

☐ Yes ☒ No

If **Yes**, use *Pledge of Compliance Attachment "A"* to explain specific circumstances of each instance; include the entity involved, specific infraction(s), dates, outcome and current status.

**I. TYPE OF SUBMISSION:** This document is submitted as:

☒ Initial submission of *Contractor Standards Pledge of Compliance*.

☐ Update of prior *Contractor Standards Pledge of Compliance* dated \_\_\_\_/\_\_\_\_/\_\_\_\_.

**Complete all questions and sign below. Each *Pledge of Compliance Attachment "A"* page must be signed.**

Under penalty of perjury under the laws of the State of California, I certify I have read and understand the questions contained in this *Pledge of Compliance* and that I am responsible for completeness and accuracy of responses and all information provided is true to the best of my knowledge and belief. I further certify my agreement to the following provisions of San Diego Municipal Code §22.3224:

- (a) To comply with all applicable local, State and Federal laws, including health and safety, labor and employment, and licensing laws that affect the employees, worksite or performance of the contract.
- (b) To notify the Purchasing Agent within fifteen (15) calendar days upon receiving notification that a government agency has begun an investigation of the Contractor that may result in a finding that the Contractor is or was not in compliance with laws stated in paragraph (a).
- (c) To notify the Purchasing Agent within fifteen (15) calendar days when there has been a finding by a government agency or court of competent jurisdiction of a violation by the Contractor of laws stated in paragraph (a).
- (d) To provide the Purchasing Agent updated responses to the *Contractor Standards Pledge of Compliance* within thirty (30) calendar days if a change occurs which would modify any response.
- (e) To notify the Purchasing Agent within fifteen (15) days of becoming aware of an investigation or finding by a government agency or court of competent jurisdiction of a violation by a subcontractor of laws stated in paragraph (a).
- (f) To cooperate fully with the Purchasing Agent and the City during any investigation and to respond to a request for information within ten (10) working days from the request date.

**Failure to sign and submit this form with the bid/proposal shall make the bid/proposal non-responsive.**

Brett Lim, Director of Marketing  
Print Name, Title

  
Signature

1/13/2012  
Date

**City of San Diego Purchasing & Contracting Department**  
**CONTRACTOR STANDARDS**  
***Pledge of Compliance Attachment "A"***

Provide additional information in space below. Use additional *Pledge of Compliance Attachment "A"* pages as needed; sign each page. Print in ink or type responses and indicate question being answered. Information provided will be available for public review, except if exempt from disclosure pursuant to applicable law.

Under penalty of perjury under the laws of the State of California, I certify I have read and understand the questions contained in this *Contractor Standards Pledge of Compliance* and that I am responsible for completeness and accuracy of responses on this *Pledge of Compliance Attachment "A"* page and all information provided is true to the best of my knowledge.

Brett Lim, Director of Marketing  
\_\_\_\_\_  
Print Name, Title

  
\_\_\_\_\_  
Signature

1/13/2012  
\_\_\_\_\_  
Date

The City of San Diego  
COMPTROLLER'S CERTIFICATE

CERTIFICATE OF UNALLOTTED BALANCE

ORIGINATING CC 3000005307  
BUS. AREA: 2113

I HEREBY CERTIFY that the money required for the allotment of funds for the purpose set forth in the foregoing resolution is available in the Treasury, or is anticipated to come into the Treasury, and is otherwise unallotted.

Amount: Fund: 720000

Purpose:

Date: By: COMPTROLLER'S DEPARTMENT

ACCOUNTING DATA

Doc. Item	Fund	Funded Program	Internal Order	Functional Area	G/L Account	Business Area	Cost Center	WBS	Original Amount
TOTAL AMOUNT									

FUND OVERRIDE ☐

CERTIFICATION OF UNENCUMBERED BALANCE

I HEREBY CERTIFY that the indebtedness and obligation to be incurred by the contract or agreement authorized by the hereto attached resolution, can be incurred without the violation of any of the provisions of the Charter of the City of San Diego; and I do hereby further certify, in conformity with the requirements of the Charter of the City of San Diego, that sufficient moneys have been appropriated for the purpose of said contract, that sufficient moneys to meet the obligations of said contract are actually in the Treasury, or are anticipated to come into the Treasury, to the credit of the appropriation from which the same are to be drawn, and that the said money now actually in the Treasury, together with the moneys anticipated to come into the Treasury, to the credit of said appropriation, are otherwise unencumbered.

Not to Exceed: \$226,275.00

Vendor: Radio Satellite Integrators

Purpose: Authorizing the Automated Vehicle Location/Global Positioning System (AVL/GPS) Contract.

Date: September 18, 2012 By: Robert Barreras COMPTROLLER'S DEPARTMENT

ACCOUNTING DATA

Doc. Item	Fund	Funded Program	Internal Order	Functional Area	G/L Account	Business Area	Cost Center	WBS	Original Amount
001	720000			OTHR-00000000-GG	590113	2113	2113140011		\$210,000.00
002	720000			OTHR-00000000-GG	516017	2113	2113140011		\$16,275.00
TOTAL AMOUNT									\$226,275.00

FUND OVERRIDE ☐

CC 3000005307